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SECOND BIBLIOGRAPHY AND CATALOGUE OF THE FOSSIL VERTEBRATA OF NORTH AMERICA

BY
OLIVER PERRY HAY

Vol. I

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ERRATA

On page 35, under Abel, O. 1922 D, the second word should read Schnauzenverletzungen.

On page 190, under Gilmore, C. W. 1909 B, the pages of the Proc. U. S. Nat. Mus. should read 35-42.

On page 191, under Gilmore, C. W. 1916 D, the plates should read lxxii-lxxviii.

On page 195, under Gilmore, C. W. 1927 D, the volume of the Smithson. Misc. Coll. should be LXXX, instead of LX.

On page 323 under Matthew and Granger 1925 A, instead of Amer. Mus. Novit., No. 186, read No. 189.

On page 342, under Mook, C. C. 1916 A, the volume cited should be XXVII, instead of XVII.

PREFACE

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In 1902 the U. S. Geological Survey published for the writer a volume entitled "Bibliography and Catalogue of the Fossil Vertebrata of North America." Since that time, through research and publication, the knowledge of the structure and relationships of fossil vertebrates, the number of new genera and species, and their geological and geographical distribution have been greatly increased. A recognition of these facts has led to the production of this "Second Bibliography and Catalogue of the Fossil Vertebrata of North America."

This work follows the same plan in general as that adopted in the volume of 1902. There is first presented a list of the scientific publications from which papers have been selected for analysis and record and for citation under the appropriate zoological divisions of the Catalogue. As in the earlier volume, author's papers are listed under the year of publication followed by a letter of the alphabet, as Gill, T. 1884 A, B, etc. In case an author has one or more papers in the volume of 1902 and one or more in the present volume, any later paper will take the next letter of the proper year, as Gill, T. 1884 E. This explanation will account for some apparent irregularities. It must be noted that only rarely has the title of any paper found in the book of 1902 been republished in the present work; nor have, with few exceptions, citations from those papers been repeated.

In the Catalogue, in case the name of a species, genus, etc., is new, the name of its author and place of publication are given first and the author's name is italicised. If the species or genus is mentioned in the volume of 1902 a reference to that volume is given either first or it follows the name of the author of the zoological title.

As regards the systematic names of families, genera and species the writer has, as strictly as his knowledge has permitted, followed "The International Rules of Zoological Nomenclature." For the higher groups these rules do not prescribe. For the superfamilies the ending *oidæ*, as employed by Dr. Leonhard Stejneger and Mr. Gerrit S. Miller, has been adopted. For the suborders the ending *formes* has sometimes been used and for the orders occasionally the ending *morphi*. These are affixed to the root of the name of the typical genus of the family.

The Catalogue of the present volume embraces the Plagiostomi, the ichthyodorulites, the Osteichthyes and the Amphibia. The succeeding part of the work will deal with the Ichnites, the Reptilia, the Aves and

the Mammalia and will terminate with an index of the systematic names used in the Catalogues of both volumes.

Besides the territory covered by the volume of 1902 the writer includes Greenland, Mexico, and Central America.

The author hopes that the labor expended on the volumes of this work will be of some service to those who are interested in vertebrate paleontology. No doubt errors of all kinds will be found in the work, but these seem to be unavoidable. It is hoped that all the described species have been recorded, but possibly a few have been overlooked. The "Zoological Record" for 1927 and that for 1928 have not been received, and in consequence valuable papers may have been missed.

The author, in conclusion, acknowledges his indebtedness to the authorities of the U. S. National Museum for access to its libraries, its laboratories and collections and for kindly aid in accomplishment of the scientific work he has tried to do. He is under still greater obligations to the officers of the Carnegie Institution of Washington for the support and encouragement they have given him during the years which have passed.

Oliver P. Hay.

LIST OF ABBREVIATIONS

WITH TITLES OF BOOKS AND JOURNALS CITED

Aarbok Bergens Mus.—Bergens Museum Aarbok. Naturvidenskabelig Raecke. Bergen.

A. O. U.—Check-list of North American Birds. Prepared by a Committee of the American Ornithologists' Union. 3d edition (revised).

Abh. Akad. Wiss. Berlin.—Abhandlungen der königlichen preussischen Akademie der Wissenschaften zu Berlin. Physikalisch-mathematische Classe. Berlin.

Abh. bayer. Akad.—Abhandlungen der mathematisch-physikalischen Classe der königlichen bayerischen Akademie der Wissenschaften. München.

Abh. Ber. Mus. Natur-Heimatsk.—Abhandlungen und Berichte des Museums für Natur- und Heimatskunde zu Magdeburg. Magdeburg.

Abh. böhmisch. Ges.—Abhandlungen der mathematisch-naturwissenschaftlichen Classe der k. böhmischen Gesellschaft. Prag.

Abh. geol. Karte Elsass.—Abhandlungen zur geologischen Spezialkarte von Elsass-Lothringen. Strassburg.

Abh. geol. Landesanst. Darmstadt.—Abhandlungen der grossherzoglich-hessischen geologischen Landesanstalt zu Darmstadt. Cited also as Abh. hess. geol. Landesanst. Darmstadt.

Abh. geol. Reichsanst. Wien.—Abhandlungen der kaiserlich-königlichen geologischen Reichsanstalt. Wien.

Abh. Ges. Götting.—Abhandlungen der königlichen Gesellschaft der Wissenschaften zu Göttingen. Mathematisch-physikalische Klasse. Berlin.

Abh. Mus. Dresden.—Abhandlungen und Berichte des königlichen zoologischen und anthropologisch-ethnographischen Museums zu Dresden. Dresden.

Abh. naturf. Ges. Halle.—Abhandlungen der naturforschenden Gesellschaft. Halle.

Abh. naturh. Ges. Nürnberg.—Abhandlungen der naturhistorischen Gesellschaft zu Nürnberg.

Abh. naturw. Ges. Isis.—Sitzungsberichte und Abhandlungen der naturwissenschaftlichen Gesellschaft "Isis" in Dresden.

Abh. preuss. geol. Landesanst.—Abhandlungen der königlich-preussischen geologischen Landesanstalt. Berlin.

Abh. schweiz. pal. Ges.—Abhandlungen der schweizerischen palaeontologischen geologischen Gesellschaft. Also called Mémoires de la Société paléontologique suisse. Basel und Genf.

Abh. Senckenb. naturf. Ges.—Abhandlungen herausgegeben von der Senckenbergischen naturforschenden Gesellschaft. Frankfurt a. M.

Abh. zool.-bot. Ges. Wien.—Abhandlungen der k. k. zoologischen-botanischen Gesellschaft. Wien.

Act. Acad. Cien. Córdoba.—Actas de la Academia nacional de Ciencias en Córdoba. Buenos Aires.

Acta Acad. Leop.-Carol.—Nova Acta Academiæ Cæsareæ Leopoldino-Carolinæ Germanicæ naturæ curiosorum. Called also: Verhandlungen der k. Leop.-Carol. deutschen Akademie der Naturforscher. Halle.

Acta Acad. Sci. Pétropol.—Acta Academiæ Scientiarum Imperialis Petropolitanæ. St. Petersburg.

Acta Soc. Faun. Fenn.—Acta Societatis pro Fauna et Flora Fennica. Helsingfors.

Acta Soc. Lund.—Acta regiæ Societatis physiographicæ Lundensis. See Acta Univ. Lund.

Acta Soc. Sci. Fenn.—Acta Societatis Scientiarum Fennicæ. Helsingfors.

Acta Soc. Sci. Upsal.—Nova Acta regiæ Societatis Scientiarum Upsaliensis. Upsala.

Acta Univ. Lund.—Acta Universitatis Lundensis. Called also: Lunds Universitets Arsskrift; and includes: Acta regiæ Societatis physiographicæ Lundensis; also called: Kongl. fysiografiska Sällskapets i Lund Handlingar. Lund, Sweden.

Acta Zool.—Acta Zoologica. Internationell Tidskrift för Zoologi. Stockholm.

Actes Mus. hist. nat. Rouen.—Actes du Muséum d'histoire naturelle de Rouen. Rouen.

Actes Soc. helvét. Sci. nat.—Actes de la Société helvétique des Sciences naturelles. Aarau. Same as Verh. schweiz. naturf. Ges.

Actes Soc. Linn. Bordeaux.—Actes de la Société Linnéenne de Bordeaux.

Aeronaut. Jour. London.—Aeronautical Journal. London.

Afh. Bergens Mus.—Afhandlinger og Aarsberetning, udgivne af Bergens Museum. Bergen.

Allg. Naturf.-Zeit.—Allgemeine Naturforscher-Zeitung. Berlin.

Amer. Anthrop.—The American Anthropologist. Lancaster.

Amer. Geologist.—The American Geologist; a monthly journal of geology and allied sciences. Minneapolis.

Amer. Invent.—American Inventor. New York.

Amer. Jour. Anat.—The American Journal of Anatomy. Baltimore.

Amer. Jour. Phys. Anthrop.—American Journal of Physical Anthropology. Washington.

Amer. Jour. Physiol.—The American Journal of Physiology. Boston.

Amer. Jour. Sci.—The American Journal of Science. New Haven.

Amer. Mercury.—The American Mercury. New York.

Amer. Micr. Jour.—The American Monthly Microscopical Journal. Washington.

Amer. Midl. Nat.—The American Midland Naturalist. Bimonthly. Notre Dame University. South Bend.

Amer. Month. Mag. Crit. Rev.—The American Monthly Magazine and Critical Review. 4 volumes 1817–1818. New York.

Amer. Mus. Guide leaflet.—American Museum of Natural History, Guide leaflet series. New York.

Amer. Mus. Jour.—The American Museum Journal. New York.

Amer. Mus. Novit.—American Museum Novitates. New York.

Amer. Naturalist.—The American Naturalist. Philadelphia, Boston, Lancaster.

An. Mus. La Plata.—Anales del Museo de La Plata. Buenos Aires.

An. Mus. Nac. Buenos Aires.—Anales del Museo Nacional de Historia Natural de Buenos Aires. Buenos Aires.

An. Mus. Nac. México.—Anales del Museo Nacional de México. Segunda época. México.

An. Mus. Nac. Montevideo.—Anales del Museo Nacional de Montevideo. Montevideo.

An. Soc. cien. Argent.—Anales de la Sociedad científica Argentina. Buenos Aires.

Anat. Anz.—Anatomischer Anzeiger. Centralblatt für die gesammte wissenschaftliche Anatomie. Amtliches Organ der anatomischen Gesellschaft. Jena.

Anat. Anz. Ergänzungsh.—Anatomischer Anzeiger. Ergänzungsheft, containing Verhandlungen der anatomischen Gesellschaft. Jena.

Anat. Hefte, Arb.—Anatomische Hefte. Erste Abteilung. Beiträge und Referate zur Anatomie und Entwickelungsgeschichte. Arbeiten aus anatomischen Instituten. Wiesbaden.

Anat. Hefte, Ergebn.—Anatomische Hefte. Zweite Abteilung. Ergebnisse der Anatomie und Entwickelungsgeschichte. Wiesbaden.

Anat. Record.—Anatomical Record. Wistar Institute of Anatomy and Biology. Philadelphia.

Anat. Stud.—Anatomische Studien. Herausgegeben von Dr. C. Hasse. Leipzig.

Ann. Brit. Geol.—Annals of British Geology. London.

Ann. Carnegie Mus.—Annals of the Carnegie Museum. Pittsburgh.

Ann. Durban Mus.—Annals of Durban Museum. Durban.

Ann. Hébert.—Annales Hébert. Annales de stratigraphie et de paléontologie du laboratoire de géologie de la faculté des Sciences de Paris. Paris.

Ann. Iowa.—Annals of Iowa. Des Moines.

Ann. Lyc. Nat. Hist. N. Y.—Annals of the Lyceum of Natural History of New York. New York.

Ann. Mag. Nat. Hist.—Annals and Magazine of Natural History, including Zoology, Botany, and Geology. London.

Ann. Med. Hist.—Annals of Medical History. New York.

Ann. Mus. Congo belge, Géol.—Annales du Musée du Congo belge. Bruxelles.

Ann. Mus. hist. nat. Belgique.—Annales du Musée royal d'histoire naturelle de Belgique. Bruxelles.

Ann. Mus. hist. nat. Marseille.—Annales du Musée d'histoire naturelle de Marseille. Zoologie. Marseille.

Ann. Mus. hist. nat. Paris.—Annales du Muséum d'histoire naturelle. Paris.

Ann. Mus. Hungar.—Annales Musei nationalis Hungarici. Budapest.

Ann. N. Y. Acad. Sci.—Annals of the New York Academy of Sciences. New York.

Ann. Nat. Hist.—Annals of Natural History, or Magazine of Zoology, Botany and Geology. London.

Ann. Natal Mus.—Annals of the Natal Government Museum. London.

Ann. naturh. Hofmus. Wien.—Annalen des k. k. naturhistorischen Hofmuseums. Wien.

Ann. Paléont. Paris.—Annales de Paléontologie. Paris.

Ann. Philos. Lond.—Annals of Philosophy. London.

Ann. Queensl. Mus.—Annals of Queensland Museum. Brisbane.

Ann. Rec. Sci. Indust.—Annual Record of Science and Industry. Edited by Spencer F. Baird. New York.

Ann. Sci. géol. Paris.—Annales des Sciences géologiques. Paris.

Ann. Sci. nat.—Annales des Sciences naturelles. Zoologie et Paléontologie. Paris.

Ann. Sci. nat. Bologna.—Nuovi Annali delle Scienze naturali. Bologna.

Ann. Soc. Agric. Lyon.—Annales de la Société d'Agriculture, Histoire naturelle et Arts utiles de Lyon. Lyons and Paris.

Ann. Soc. Agric. Puy.—Annales de la Société d'Agriculture, Sciences, etc., du Puy. Le Puy.

Ann. Soc. Belge Micr.—Annales de la Société Belge de Microscopie. Bruxelles.

Ann. Soc. géol. Belgique.—Annales de la Société géologique de Belgique. (Consist of Bulletin and Mémoires.) Liege.

Ann. Soc. géol. Nord.—Annales de la Société géologique du Nord. Lille.

Ann. Soc. Linn. Lyon.—Annales de la Société Linnéenne de Lyon. Lyon.

Ann. Soc. Méd. Gand.—Annales et Bulletin de la Société de Médecine de Gand. Gand.

Ann. Soc. scient. Bruxelles.—Annales de la Société scientifique de Bruxelles. Bruxelles.

Ann. Soc. zool. Belgique.—Annales de la Société royale zoologique et malacologique de Belgique. Mémoires et Bulletins. Bruxelles.

Ann. S. African Mus.—Annals of South African Museum. Cape Town.

Ann. Transvaal Mus.—Annals of Transvaal Museum. Pretoria.

Ann Univ. Lyon.—Annales de l'Université de Lyon. Sciences, Médecine. Lyon.

Ann. Wien. Mus. Zool. Abh.—Zoologische Abhandlungen aus den Annalen des Wiener Museums der Naturgeschichte. Wien.

Annuaire Géol. Min. Russie.—Annuaire géologique et minéralogique de la Russie. Nova Alexandria.

Annuaire Mus. St. Pétersb.—Annuaire du Musée zoologique de l'Académie impériale de St. Pétersbourg.

Annuar. Mus. Univ. Napoli.—Annuario del Museo zoologico della R. Università di Napoli. Napoli.

Anthrop. Pap. Amer. Mus. Nat. Hist.—Anthropological Papers of the American Museum of Natural History. New York.

Anz. Akad. Wiss. Wien.—Anzeiger der k. Akademie der Wissenschaften. Mathematisch-naturwissenschaftliche Classe. Wien.

Aquarium Bull.—The Aquarium Bulletin. Brooklyn, N. Y.

Aquila.—Aquila. Budapest.

Arb. anat. Inst. Univ. Sendai.—Arbeiten aus dem anatomischen Institut der kaiserlich-japanischen Universität zu Sendai. Tokyo.

Arb. Inst. Würzburg.—Arbeiten aus dem zoologischen-zootomischen Institut in Würzburg. Wiesbaden.

Arb. Naturf.-Ver. Riga.—Arbeiten des Naturforscher-Vereins zu Riga. Riga.

Arb. zool. Inst. Wien.—Arbeiten aus dem zoologischen Institut der Universität Wien und der zoologischen Station in Triest. Wien.

Arch. Anat. Entwickl.—Archiv für Anatomie und Entwickelungsgeschichte. Anatomische Abteilung des Archives für Anatomie und Physiologie. Leipzig.

Arch. Anat. micr. Paris.—Archives d'Anatomie microscopique. Paris.

Arch. Anat. Physiol. Leipzig.—See Arch. Anat. Entwickl.

Arch. Anat. Physiol. Med.—Archiv für Anatomie, Physiologie und wissenschaftliche Medicin. Berlin.

Arch. Anthropol.—Archiv für Anthropologie. Braunschweig.

Arch. Antropol. Etnol.—Archivio per l'antropologia e la etnologia. Firenze.

Arch. Biol.—Archives de Biologie. Gand, Paris, etc.

Arch. Biontol.—Archiv für Biontologie (Gesellschaft naturforschender Freunde). Berlin.

Arch. Comm. Sci. Mex.—Archives de la Commission scientifique du Mexique. Paris.

Arch. Dorpat. Ges.—Archiv für die Naturkunde Liv-, Esth- und Kurlands. Herausgegeben von der Dorpater Naturforscher-Gesellschaft. Dorpat.

Arch. Entwickl.-mech. Organ.—Archiv für Entwickelungsmechanik der Organismen. Leipzig.

Arch. Hydrobiol.—Archiv für Hydrobiologie. Organ der internationalen Vereinigung für theoretische und angewandte Limnologie. Stuttgart.

Arch. ital. Anat. Embr.—Archivio italiano di anatomia e di embriologia. Firenze.

Arch. ital. Biol.—Archives italiennes de Biologie. Turin, Pise.

Arch. mikr. Anat. Bonn.—Archiv für mikroskopische Anatomie. Bonn.

Arch. Min. Geogn. Bergb.—Archiv für Mineralogie, Geognosie, Bergbau, etc. Berlin.

Arch. Mus. hist. nat. Lyon.—Archives du Muséum d'histoire naturelle. Lyon.

Arch. Mus. hist. nat. Paris.—Nouvelles Archives du Muséum d'histoire naturelle. Paris.

Arch. Mus. Rio Jan.—Archives do Museu Nacional do Rio de Janeiro. Brazil.

Arch. Mus. Teyler.—Archives du Musée Teyler. Haarlem.

Arch. Naturges.—Archiv für Naturgeschichte. Berlin.

Arch. Ohrenheilk.—Archiv für Ohrenheilkunde. Leipzig.

Arch. Rassenbiol.—Archiv für Rassen- und Gesellschaftsbiologie, etc. Leipzig.

Arch. Sci. biol.—Archives des Sciences biologiques. Publiées par l'Institut Impérial de Médecine expérimentale à St. Pétersbourg.

Arch. Sci. Méd.—Archives des Sciences Médicales. Organ de l'Institut d'Anatomie et de Chirurgie de Bucarest. Paris.

Arch. Sci. Phys. Nat.—Archives des Sciences physiques et naturelles. Genève.

Arch. wiss. u. prakt. Tierheilk.—Archiv für wissenschaftliche und praktische Tierheilkunde. Berlin.

Arch. Zool. expér.—Archives de Zoologie expérimentale et générale. Paris.

Arkiv Zool.—Arkiv för Zoologi. Utgifvet af k. Svenska Vetenskapsakademien. Upsala and Stockholm.

Årssk. Vetensk.-Soc. Upsala.—Årsskrift, utgiven af kongl. Vetenskaps-Societenten. Upsala.

Asia.—New York.

Asiat. Res.—Asiatic Researches; or Transactions of the Society instituted in Bengal, etc. Calcutta.

Atlant. Jour.—Atlantic Journal and Friend of Knowledge. Philadelphia.

Atti Accad. Lincei.—Atti della R. Accademia dei Lincei. Della Classe di Scienze fisiche, matematiche e naturali. Roma. Consists of Memorie and Rendiconti.

Atti Accad. Pont. Lincei.—Atti dell' Accademia Pontificia dei nuovi Lincei. Roma.

Atti Accad. Sci. Napoli.—Atti dell' Accademia delle Scienze fisiche e matematiche. Napoli.

Atti Accad. Sci. Palermo.—Atti della Reale Accademia di Scienze, Lettere e Belle Arti di Palermo. Palermo.

Atti Accad. Sci. Torino.—Atti della R. Accademia delle Scienze di Torino. Torino.

Atti Soc. Ital. Sci. Nat.—Atti della Società Italiana di Scienze Naturali e del Museo Civili di storia naturale. Milano.

Atti Soc. Nat. Modena.—Atti della Società dei Naturalisti e matematici di Modena. Modena.

Atti Soc. Toscana Sci. Nat.—Atti della Società Toscana di Scienza Naturali residente in Pisa. Pisa.

Augustana Lib. Publ.—Augustana Library Publications. Rock Island, Ill.

Auk.—The Auk: a quarterly Journal of Ornithology. New York.

Aus der Heimat.—Aus der Heimat: Naturwissenschaftliche Monatsschrift. Stuttgart.

Aus der Natur.—Aus der Natur: Zeitschrift für alle Naturfreunde. Leipzig.

Baylor Bull.—Baylor Bulletin. Baylor University. Waco, Texas.

Beitr. Pal. Geol. österr.-Ung.—Beiträge zur Paläontologie und Geologie Österreich-Ungarns und des Orients. Wien.

Ber. Mus. Franc.-Carl. Linz.—Bericht über das Museum Francisco-Carolinum in Linz. Linz, Austria.

Ber. naturf. Ges. Bamberg.—Bericht der naturforschenden Gesellschaft in Bamberg. Bamberg.

Ber. naturf. Ges. Freiburg.—Berichte der naturforschenden Gesellschaft zu Freiburg i. B. Freiburg.

Ber. naturf. Ges. Halle.—Bericht über die Sitzungen der naturforschenden Gesellschaft zu Halle. Halle.

Ber. naturhist. Ver. Augsburg.—Bericht des naturhistorischen Vereins in Augsburg. Augsburg.

Ber. oberrhein. geol. Ver.—Bericht über die Versammlungen des oberrheinischen geologischen Vereins. Stuttgart.

Ber. Senckenb. naturf. Ges.—Bericht über die Senckenbergische naturforschende Gesellschaft in Frankfurt-am-Main.

Ber. St. Gall. naturw. Ges.—Bericht der St. Gallischen naturwissenschaftlichen Gesellschaft. St. Gallen.

Bibl. anat.—Bibliographie anatomique. Paris, Nancy.

Bibl. géol. Russie.—Bibliothèque géologique de la Russie. St. Pétersbourg.

Bibl. Serv. Wistar Inst.—Bibliographic Service of the Wistar Institute of Anatomy and Biology. Abstracts on cards. Philadelphia.

Bibl. Zool.—Bibliographia Zoologica. Leipzig.

Bihang Svenska Vet. Akad. Handl.—Bihang till kongl. Svenska Vetenskaps Akademiens Handlingar. Stockholm.

Bijdr. Anat. Haarlem.—Petrus Camper. Nederlandische Bijdragen tot de Anatomie. Haarlem.

Bijdr. Dierk. Amsterdam.—Bijdragen tot de Dierkunde, etc. Amsterdam.

Biol. Bull.—Biological Bulletin, published by the Marine Biological Laboratory, Woods Hole, Mass.

Biol. Centr. Amer.—Biologia Centrali-Americana. London.

Biol. Centralbl.—Biologisches Centralblatt. Leipzig.

Biol. Foren. Forh.—Biologiska Föreningens Förhandlingar. Verhandlungen des biologischen Vereins in Stockholm.

Biol. Gen.—Biologia Generalis. International journal of general biology. Vienna, Bratislava, Baltimore.

Biol. Lect. Woods Hole.—Biological lectures from the Marine Biological Laboratory. Woods Hole, Massachusetts. Boston.

Biol. Zeitschr. Moscow.—Biologische Zeitschrift. Moscow.

Biol. Zentralbl.—See Biol. Centralbl.

Bol. Acad. Cien. Córdoba.—Boletín de la Academia nacional de Ciencias en Córdoba (República Argentina). Buenos Aires.

Bol. Com. geol. Ital.—Bollettino del R. Comitato geologico d'Italia. Roma.

Bol. Direc. Estud. Biolog.—Boletín de la Dirección de Estudios Biológicos. México.

Bol. Inst. Geol. Méx.—Boletín del Instituto Geológico de México. City of Mexico.

Bol. Mus. nat. México.—Boletín del Museo nacional de México. City of Mexico.

Bol. Soc. españ. hist. nat.—Boletín de la R. Sociedad española de historia natural. Madrid.

Bol. Soc. Geogr. Estad. Rep. mex.—Boletín de la Sociedad Geografía y Estadística de la República mexicana. City of Mexico.

Boll. Mus. Zool. Anat. Torino.—Bollettino dei Musei di Zoologia e di Anatomia comparata della R. Università. Torino.

Boll. Soc. geol. Ital.—Bollettino della Società geologica Italiana. Roma.

Boll. Soc. Napoli.—Bollettino della Società di Naturalisti. Napoli.

Boll. Soc. zool. Ital.—Bollettino della Società zoologica Italiana. Roma.

Brit. Dental Jour.—British Dental Journal. The journal of the British Dental Association. London.

Brit. Jour. Dental Sci.—British Journal of Dental Science. London.

Brit. Med. Jour.—British Medical Journal; the journal of the British Medical Association. London.

Bronn's Klass. Ordn.—Bronn's Klassen und Ordnungen des Thierreichs. Leipzig.

Bull. Acad. Sci. Belgique.—Bulletins de l'Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique. Bruxelles.

Bull. Acad. Sci. Cracovie.—Bulletin international de l'Académie des Sciences de Cracovie. Comptes-rendus des séances; also designated as Anzeiger der Akademie der Wissenschaften in Krakau. Cracovie.

Bull. Acad. Sci. Russ.—Bulletin de l'Académie des Sciences de Russie. Leningrad.

Bull. Acad. Sci. St. Pétersb.—Izvyestiya imperatorskoi akademii nauk (Bulletin de l'Académie impériale des Sciences de St. Pétersbourg).

Bull. Amer. Mus. Nat. Hist.—Bulletin of American Museum of Natural History. New York.

Bull. Amer. Pal.—Bulletins of American Paleontology, Cornell University. Ithaca.
Bull. Assoc. Sci. France.—Bulletin de l'Association Scientifique de France.
Bull. Brit. Ornith. Club.—Bulletin of British Ornithologists' Club. London.
Bull. Buffalo Soc. Nat. Sci.—Bulletin of Buffalo Society of Natural Sciences. Buffalo.
Bull. Calif. Acad. Sci.—Bulletin of California Academy of Sciences. San Francisco.
Bull. Chicago Acad. Sci.—Bulletin of Chicago Academy of Sciences. Chicago.
Bull. Com. géol. St. Pétersb.—Bulletin du Comité géologique de St. Pétersbourg. Petrograd.
Bull. Conn. Geol. Nat. Hist. Surv.—Bulletin of Geological and Natural History Survey of Connecticut. Hartford.
Bull. Cornell Univ. Sci.—Bulletin of Cornell University. (Science.) Ithaca.
Bull. Dept. Geol. Univ. Calif.—University of California publications. Bulletin of Department of Geology. Berkeley.
Bull. Essex Inst.—Bulletin of Essex Institute. Salem, Mass.
Bull. Géol. Caen.—Bulletin du Laboratoire de Géologie de la Faculté des Sciences de Caen. Caen.
Bull. Geol. Instn. Upsala.—Bulletin of Geological Institution of the University of Upsala. Upsala.
Bull. Geol. Soc. Amer.—Bulletin of Geological Society of America. New York.
Bull. Geol. Surv. Alabama.—Geological Survey of Alabama. Bulletins. Montgomery.
Bull. Geol. Surv. Georgia.—Geological Survey of Georgia. Bulletins. Atlanta.
Bull. Geol. Surv. Minnesota.—Bulletins. Geological and Natural History Survey of Minnesota. Minneapolis.
Bull. Geol. Surv. Missouri.—Geological Survey of Missouri. Bulletins. Jefferson City.
Bull. Geol. Surv. New Jersey.—Geological Survey of New Jersey. Bulletins. Trenton.
Bull. Geol. Surv. Ohio.—Geological Survey of Ohio. Bulletins. Columbus.
Bull. Geol. Surv. Victoria.—Victoria, Department of Mines. Bulletins of the Geological Survey of Victoria. Melbourne.
Bull. Ill. Mus. Nat. Hist.—Bulletin of Illinois State Museum of Natural History. Springfield.
Bull. internat. Acad. Sci. Cracovie.—Bulletin international de l'Académie des Sciences de Cracovie. Classe des Sciences mathématiques et naturelles. Same as Anzeiger der Akademie der Wissenschaften in Krakau. Cracovie.
Bull. internat. Acad. Sci. Prague.—Bulletin international de l'Académie des Sciences. Classe des Sciences mathématiques, naturelles, etc. Prague.
Bull. Lab. Nat. Hist. Iowa.—Bulletins from Laboratories of Natural History of State University of Iowa. Iowa City.
Bull. Liverpool Mus.—Bulletin of Liverpool Museums. Liverpool.
Bull. Mém. Soc. Anthrop.—Bulletins et Mémoires de la Société d'Anthropologie de Paris. Paris.
Bull. Min. Acad. Sci.—Bulletin of Minnesota Academy of Natural Sciences. Minneapolis.
Bull. Mus. Comp. Zool.—Bulletin of Museum of Comparative Zoology at Harvard College. Cambridge.
Bull. Mus. hist. nat. Paris.—Bulletin du Muséum d'histoire naturelle. Paris.
Bull. Mus. Roy. hist. nat. Belgique.—Bulletin du Musée d'histoire naturelle de Belgique. Bruxelles.
Bull. N. Y. State Mus.—Bulletin of New York State Museum of Natural History. Albany.
Bull. N. Y. Zool. Soc.—Bulletin of New York Zoological Society. New York.

Bull. Nat. Hist. Soc. N. Brunsw.—Bulletin of Natural History Society of New Brunswick. St. John.

Bull. Neb. State Mus.—Bulletin of Nebraska State Museum. Lincoln.

Bull. Peabody Mus. Nat. Hist.—Bulletin of Peabody Museum of Natural History. New Haven.

Bull. Phillips Acad.—Bulletin of Department of Archæology of Phillips Academy. Andover.

Bull. Philos. Soc. Wash.—Bulletin of Philosophical Society of Washington. Washington.

Bull. Proc. Nat. Instn. Prom. Sci.—Bulletin of Proceedings of the National Institution for Promotion of Science. Washington.

Bull. S. Carol. Geol. Surv.—Bulletin of South Carolina Geological Survey. Columbia.

Bull. S. Dakota Geol. Surv.—South Dakota Geological Survey. Bulletin. Vermilion.

Bull. S. Dakota Sch. Mines.—South Dakota School of Mines. Department of Geology. Bulletin. Rapid City.

Bull. Sch. Mines Colorado.—Bulletin of Colorado School of Mines. Golden.

Bull. Sci. France Belgique.—Bulletin scientifique de la France et de la Belgique. Paris.

Bull. Sci. Lab. Denison Univ.—Bulletin of Scientific Laboratories of Denison University. Granville.

Bull. Sci. Soc. S. Antonio.—Bulletin of Scientific Society of San Antonio, Texas. San Antonio.

Bull. So. Calif. Acad. Sci.—Bulletin of Southern California Academy of Science. Los Angeles.

Bull. Soc. belge Géol.—Bulletin de la Société belge de Géologie, de Paléontologie et d'Hydrologie. (Consists of Procès-verb. and Mémoires.) Bruxelles.

Bull. Soc. géol. Belgique.—(Included in Ann. Soc. géol. Belgique, q. v.)

Bull. Soc. géol. France.—Bulletin de la Société géologique de France. Paris.

Bull. Soc. géol. Normandie.—Bulletin de la Société géologique de Normandie. Havre.

Bull. Soc. Linn. Nord France.—Bulletin de la Société Linnéenne du Nord de la France. Amiens.

Bull. Soc. Natural. Moscou.—Bulletin de la Société impériale des Naturalistes de Moscou. Moscou.

Bull. Soc. Philom. Paris.—Bulletin de la Société Philomatique de Paris. (Includes Comptes-rendus.) Paris.

Bull. Soc. Sci. Linn.—Bulletin de la Société royale Linnéenne. Bruxelles.

Bull. Soc. Sci. nat. Ekat.—Bulletin de la Société ouralienne d'amateurs des Sciences naturelles. Ekaterinburg.

Bull. Soc. Sci. nat. Elbeuf.—Bulletin de la Société d'Études des Sciences naturelles d'Elbeuf.

Bull. Soc. Sci. nat. Neuchâtel.—Bulletin de la Société des Sciences naturelles de Neuchâtel.

Bull. Soc. vaud. Sci. nat.—Bulletin de la Société vaudoise des Sciences naturelles. Lausanne.

Bull. Soc. Zool. France.—Bulletin de la Société Zoologique de France. Paris.

Bull. U. S. Bur. Fish.—Bulletin of United States Bureau of Fisheries. Washington.

Bull. U. S. Dept. Agric. Biol.—U. S. Department of Agriculture. Division of Biological Survey. Washington.

Bull. U. S. Fish Comm.—Bulletin of United States Fish Commission. Washington.

Bull. U. S. Geol. Geog. Surv. Terrs. Hayden.—Bulletin of United States Geological and Geographical Survey of the Territories. F. V. Hayden. Washington.

Bull. U. S. Geol. Surv.—Bulletin of United States Geological Survey. Washington.

Bull. U. S. Nat. Mus.—Bulletin of United States National Museum. Washington.

Bull. Univ. Alberta, Dept. Geol.—Bulletin of University of Alberta, Department of Geology. Edmonton.

Bull. Univ. Kansas.—Bulletin of University of Kansas. Lawrence.

Bull. Univ. Montana.—Bulletin of University of Montana. Missoula.

Bull. Univ. Oregon.—Bulletin of Oregon University. Eugene.

Bull. Univ. Texas.—Bulletin of University of Texas. Austin.

Bull. Victoria Mem. Mus. Canada.—Bulletin of Victoria Memorial Museum, Canada. Ottawa.

Bull. Washburn Lab. Nat. Hist.—Bulletin of Washburn Laboratory of Natural History. Topeka.

Bull. Wis. Geol. Nat. Hist. Surv.—Wisconsin Geological and Natural History Survey. Bulletin. Scientific Series. Madison.

Bull. Wis. Nat. Hist. Soc.—Bulletin of Wisconsin Natural History Society. Milwaukee.

Bull. Zool. Soc. N. Y.—News Bulletin of Zoological Society. New York.

Bur. Amer. Ethnol. Bull.—Bureau of American Ethnology. Bulletins. Washington.

Bur. Amer. Ethnol., Rep.—Annual report of Bureau of American Ethnology. Smithsonian Institution. Washington.

Cambridge Nat. Hist.—The Cambridge Natural History. Edited by Harmer and Shiply. 10 vols. London.

Can. Geol. Surv.—Geological Survey of Canada. Department (Section) of Mines. Ottawa.

Canad. Field-Naturalist.—The Canadian Field-Naturalist. Ottawa.

Canad. Natural. Geol.—Canadian Naturalist and Geologist. Montreal.

Canad. Natural. Quart. Jour. Sci.—The Canadian Naturalist and Quarterly Journal of Science. Cited also as Canadian Naturalist. Montreal.

Canad. Rec. Sci.—The Canadian Record of Science, including the proceedings of the Natural History Society of Montreal. Montreal.

Cent. Mag.—The Century illustrated monthly Magazine. New York.

Centralbl. Min. Geol. Pal.—Centralblatt für Mineralogie, Geologie und Palaeontologie; in Verbindung mit dem Neuen Jahrbuch für Mineralogie, Geologie und Palaeontologie. Stuttgart.

Chall. Rep. Zool.—Report of the scientific results of the voyage of H. M. S. *Challenger* during the years 1873–76. London.

Christ. Albr. Univ. Kiel.—Christian-Albrechts-Universität. Kiel.

Coll. Yale Univ.—Collections of Yale University. New Haven.

Colorado Coll. Stud.—Colorado College Studies. Papers read before the Colorado College Scientific Society. Colorado Springs.

Com. Mus. Nac. Buenos Aires.—Comunicaciones de Museo nacional de Historia natural. Buenos Aires.

C. R. Acad. Sci. Paris.—Comptes-rendus hebdomadaires des séances de l'Académie des Sciences. Paris.

C. R. Assoc. Anatomistes.—Comptes-rendus de l'Association des Anatomistes. Places of meeting change. France.

C. R. Assoc. franç. Avanc. Sci.—Comptes-rendus de l'Association française pour l'avancement des Sciences. Paris.

C. R. Congr. internat. Géol.—Comptes-rendus du Congrès international de Géologie. Places of meeting change.

C. R. Congr. internat. Méd.—Comptes-rendus du Congrès international de Médecine. Places of publication change.

C. R. Congr. internat. Zool.—Compte-rendu des Séances du Congrès international de Zoologie. See Proceedings and Verhandlungen. Places of meeting change.

C. R. Soc. Biol.—Comptes-rendus hebdomadaires des Séances et Mémoires de la Société de Biologie. Paris.

C. R. Soc. géol. France.—Compte-rendu des Séances de la Société géologique de France. Paris.

C. R. Soc. Helvét.—Archives des Sciences physiques et naturelles. Compte-rendu des travaux de la Société Helvétique des Sciences naturelles. Genève.

C. R. Soc. philom. Paris.—Comptes-rendus sommaires de la Société philomatique de Paris.

Condor.—The Condor. A magazine of western Ornithology. Berkeley.

Contrib. Canad. Pal.—Contributions to Canadian Palæontology. Montreal, Ottawa.

Contrib. Mus. Geol. Univ. Mich.—Contributions from Museum of Geology, University of Michigan. Ann Arbor.

Contrib. Walker Mus.—Contributions to Walker Museum, University of Chicago. Chicago.

Copeia.—Published to advance the science of cold-blooded vertebrates. New York.

Corresp.-Bl. deutsch. Ges. Anthrop.—Correspondenzblatt der deutschen Gesellschaft für Anthropologie. Braunschweig.

Corresp.-Bl. Zahnärzte.—Correspondenzblatt für Zahnärzte. Berlin.

Dana Comm. Lectures.—Dana Commemoration Lectures. New Haven.

Dansk ornith. For. Tidsskr.—Dansk ornithologisk Forenings Tidsskrift. Copenhagen.

Danske Vidensk. Afhandl.—Det kongelige Danske Videnskabernes Selskabs naturvidenskabelige og mathematiske Afhandlinger. Copenhagen.

Danske Vidensk. Selsk. Biol. Medd.—Det kongelige Danske Videnskabernes Selskabs. Biologiske Meddelelser. Copenhagen.

Danske Vidensk. Selsk. Forh. Overs.—Oversigt over det kongelige Danske Videnskabernes Selskabs Forhandlinger. Copenhagen.

Danske Vidensk. Selsk. Skr.—Det kongelige Danske Videnskabernes Selskabs Skrifter. Naturvidenskabelige og mathematiske Afdeling. Copenhagen.

Denk. Akad. Wiss. Wien.—Denkschriften der kaiserlichen Akademie der Wissenschaften zu Wien. Math.-naturhist. Cl. Wien.

Denk. med.-naturw. Ges. Jena.—Denkschriften der medicinisch-naturwissenschaftlichen Gesellschaft. Jena.

Denk. Schweiz. Ges. Naturw.—Neue Denkschriften der allgemeinen Schweizerischen Gesellschaft für die gesammten Naturwissenschaften. Also called: Nouveaux Mémoires de la Société Helvétique des Sciences naturelles. Zürich.

Deutsche Monatsschr. Zahnheilk.—Deutsche Monatsschrift für Zahnheilkunde. Organ des Central-Vereins deutscher Zahnärzte. Berlin.

Deutsches Arch. Physiol.—Deutsches Archiv für die Physiologie. Halle und Berlin.

Diag. N. A. Mamm.—Diagnoses of North American Mammals. Washington.

Discovery.—New York.

E. Mus. Lund.—Samling af Afhandlinger. E. Museo Lundii. Copenhagen.

Eclogæ geol. Helvetiæ.—Eclogæ geologicæ Helvetiæ. Lausanne.

Econom. Geol.—Economic Geology. Lancaster, Pa.

Edinb. Jour. Sci.—The Edinburgh Journal of Science. Edinburgh.

Edinb. New Philos. Jour.—Edinburgh New Philosophical Journal. Edinburgh.

Edinb. New Philos. Mag.—Edinburgh New Philosophical Magazine. Edinburgh.

Emu.—The Emu. Official organ of Australasian Ornithologists' Union. Melbourne.

Encyclop. Brit.—The Encyclopædia Britannica. Cambridge, England.

Encyclop. Méthod. Syst. Anat.—Encyclopédie Méthodique. Système Anatomique. Paris.

Fauna arctica.—Fauna arctica: eine Zusammenstellung der arktischen Tierformen. Jena.

Fauna Flora, Upsala.—Fauna och Flora: Populär Tidsskrift for Biologie. Upsala and Stockholm.

Festschr. 3. Saecularfeier A. J. Maxim.—Festschrift zur dritten Saecularfeier der Alma Julia Maximiliana. Gewidmet von der medicinischen Facultät. Würzburg.

Festschr. 350-jähr. Jubelf. Thüring. Univ.—Festschrift zur 350-jährigen Jubelfeier der Thüringer Universität. Jena.

Field.—The Field. London.

Field Columb. Mus. Geol.—Field Columbian Museum Publications. Geological Series. Chicago.

Field Columb. Mus. Zool.—Field Columbian Museum Publications. Zoological Series. Chicago.

Field Mus. Nat. Hist. Geol.—Field Museum Natural History. Geological Series. Chicago.

Final Rep. Geol. Surv. Minn.—Final report of Geological Survey of Minnesota. Minneapolis.

Földt. Közl.—Földtani Közlöny. Geologische Mittheilungen. Zeitschrift der ungarischen Gesellschaft. Budapest.

Folio U. S. Geol. Surv.—United States Geological Survey. Geologic Folio. Washington.

Forest and Stream.—New York.

Fortschr. Geol. Pal.—Fortschritte der Geologie und Palaeontologie. Berlin.

Froriep's Notizen.—Neue Notizen aus dem Gebiete der Natur und Heilkunde gesammelt und mitgetheilt von Ludwig Friederich v. Froriep und Dr. Robert Froriep. Weimar.

Froriep's Tagsber.—Tagsberichte über die Fortschritte der Natur und Heilkunde. Abtheilung für Zoologie und Palaeontologie. Weimar.

Gelehrte Anz. Bayer. Akad.—Gelehrte Anzeigen. Bayerische Akademie. München.

Geognost. Jahresh.—Geognostische Jahreshefte; herausgegeben von der geognostischen Abteilung des k. bayer. Oberbergamtes in München.

Geol. Centralbl.—Geologisches Centralblatt: Anzeiger für Geologie, Petrographie, Palaeontologie und verwandte Wissenschaften. Leipzig.

Geol. Mag.—The Geological Magazine, or Monthly Journal of Geology; with which is incorporated "The Geologist." New series. London.

Geol. Pal. Abh. Jena.—Geologische und Palaeontologische Abhandlungen. E. Koken. Jena.

Geol. Soc. Amer. Prelim. lists.—Geological Society of America. Preliminary lists of titles and abstracts to be offered at the meetings.

Geol. Surv. Ala.—Reports of Geological Survey of Alabama. Montgomery.

Geol. Surv. Ill.—Geological Survey of Illinois, Springfield. Also Illinois State Geological Survey. Urbana.

Geol. Surv. Ind.—Geological Survey of Indiana; also reports of Department of Geology and Natural History; of Bureau of Statistics and Geology; Department of Geology and Natural Resources. Indianapolis.

Geol. Surv. Michigan.—Geological Survey of Michigan. Lansing.

Geol. Surv. Missouri.—Reports of Geological Survey of the State of Missouri. Jefferson City.

Geol. Surv. N. Carolina.—Reports of Geological Survey of North Carolina. Raleigh.

Geol. Surv. New York.—Reports of various State Geologists. Albany.

Geol. Surv. Nigeria.—Geological Survey of Nigeria.

Geol. Surv. Ohio.—Reports of Geological Survey of Ohio. Columbus.

Geol. Surv. Penn.—Reports of Geological Survey of Pennsylvania. Harrisburg.

Geol. Surv. Texas.—Reports of Geological Survey of Texas. Austin.

Geol. Surv. Wisconsin.—Reports of Geological Survey of Wisconsin. Madison.

Geol. Zentralbl.—See Geol. Centralbl.

Geologist.—The Geologist. London.

Gior. Sci. nat. econ. Palermo.—Giornale di Scienze naturali ed economiche. Palermo.

Globus.—Illustrierte Zeitschrift für Länder- und Völkerkunde. Braunschweig.

Guide to Nature.—The Guide to Nature, Education, and Recreation. Stamford, Conn.

Handel. Ned. Nat. Geneesk. Congr.—Handelingen van het Nederlandsch Natuur- en Geneeskundig Congres.

Harper's Month. Mag.—Harper's Monthly Magazine. New York.

Harper's New Month. Mag.—Harper's New Monthly Magazine. New York.

Harvey Lect.—Harvey Lectures. Philadelphia, London.

Hertwig's Handb. vergl. exper. Entwickelungsl. Wirbelt.—Hertwig's Handbuch der vergleichenden und experimentalen Entwickelungslehre der Wirbeltiere. 8vo. Jena.

Ibis.—The Ibis: a quarterly Journal of Ornithology. London.

Ichth. Ohien.—Ichthyologia Ohiensis, or Natural history of the fishes inhabiting the River Ohio and its tributary streams. 8vo. Lexington, Ky., 1820.

Ill. Biol. Monogr.—Illinois Biological Monographs. Published by the University of Illinois. Urbana.

Internat. Amerikanisten-Kongr.—Internationaler Amerikanisten-Kongress. Same as below. Places of meeting change.

Internat. Congr. Americanists.—International Congress of Americanists. Same as above.

Internat. Geol.-Congr.—See C. R. Congr. internat. Géol.

Internat. Jour. Anat. Physiol.—Monthly international Journal of Anatomy and Physiology. Also issued as: Journal international d'anatomie et de physiologie; and as: Internationale Monatsschrift für Anatomie und Histologie. Paris, Leipzig, London.

Internat. Jour. Orthodon.—The international Journal of Orthodontia. St. Louis.

Internat. Monatsschr. Anat. Physiol.—Internationale Monatsschrift für Anatomie und Physiologie. Leipzig.

Internat. Ornith. Congr.—International Ornithological Congress. Places of meeting change.

Internat. Rev. Hydrobiol. Hydrogr.—International Revue der gesamten Hydrobiologie und Hydrographie. Leipzig.

Iowa Geol. Surv.—Annual reports of Iowa Geological Survey. Des Moines.

Irish Naturalist.—The Irish Naturalist. Dublin.

Isis von Oken.—Isis (oder Encyclopädische Zeitung). Published by L. Oken. Jena.

Jahrb. geol. Landesanst. Berlin.—Jahrbuch der königlich-preussischen geologischen Landesanstalt und Bergakademie zu Berlin.

Jahrb. geol. Reichsanst. Wien.—Jahrbuch der kaiserlich-königlichen geologischen Reichsanstalt. Wien.

Jahrb. Min. Geogn. Geol.—Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefactenkunde. Stuttgart.

Jahrb. Min. Geol. Pal.—Neues Jahrbuch für Mineralogie, Geologie und Paläontologie. With also Beilage-Band. Stuttgart.

Jahrb. Nassau. Ver. Naturk.—Jahrbuch des Nassauischen Vereins für Naturkunde. Wiesbaden.

Jahrb. St. Gallisch. naturw. Ges.—Jahrbuch der St. Gallischen naturwissenschaftlichen Gesellschaft. St. Gallen.

Jahrb. Wiss. Tierzucht.—Jahrbuch für wissenschaftliche und praktische Tierzucht. Hannover.

Jahresber. Anat. Entwickl.—Jahresberichte über die Fortschritte der Anatomie und Entwicklungsgeschichte. Jena.

Jahresber. böhm. Ges. Wiss.—Jahresbericht der königlich-böhmischen Gesellschaft der Wissenschaften. Prag.

Jahresber. niedersächs. geol. Ver.—Jahresbericht des niedersächsischen geologischen Vereins. Geologisches. Hannover.

Jahresber. ornith. Ver. München.—Jahresbericht des ornithologischen Vereins München. München.

Jahresber. schles. Ges. vaterl. Kult.—Jahresbericht der schlesischen Gesellschaft für vaterländische Kultur. Breslau.

Jahresber. Ver. Naturwiss. Braunsch.—Jahresbericht des Vereins für Naturwissenschaft zu Braunschweig. Braunschweig.

Jahresh. Ver. Naturk. Württemb.—Jahreshefte des Vereins für vaterländische Naturkunde in Württemberg. Stuttgart.

Jena. Zeitschr. Naturwiss.—Jenaische Zeitschrift für Naturwissenschaft. Jena.

Johns Hopkins Univ. Circ.—Johns Hopkins University Circulars. Baltimore.

Johns Hopkins Univ. Stud.—Johns Hopkins University Studies from Biological Laboratory. Baltimore.

Jour. Acad. Nat. Sci. Phila.—Journal of Academy of Natural Sciences of Philadelphia. Philadelphia.

Jour. Agric. Res.—Journal of Agricultural Research. Washington.

Jour. Amer. Med. Assoc.—Journal of American Medical Association. Chicago.

Jour. Amer. Mus. Nat. Hist.—Journal of American Museum of Natural History. New York.

Jour. Anat. Lond.—The Journal of Anatomy. Originally The Journal of Anatomy and Physiology. London.

Jour. Anat. Physiol. Lond.—The Journal of Anatomy and Physiology, Normal and Pathological. London.

Jour. Anat. Physiol. Paris.—Journal de l'Anatomie et de la Physiologie normales et pathologiques de l'homme et des animaux. Paris.

Jour. Asiat. Soc. Bengal.—Journal of Asiatic Society of Bengal. Calcutta.

Jour. Cincinnati Soc. Nat. Hist.—Journal of Cincinnati Society of Natural History. Cincinnati.

Jour. Coll. Sci. Tokyo.—Journal of College of Science, Imp. University of Tokyo. Tokyo.

Jour. Comp. Med. Surg.—Journal of Comparative Medicine and Surgery. Philadelphia.

Jour. Comp. Neur.—Journal of Comparative Neurology. Granville, Ohio.

Jour. Elisha Mitchell Sci. Soc.—Journal of Elisha Mitchell Scientific Society. Chapel Hill, N. C.

Jour. Franklin Inst.—Journal of Franklin Institute. Philadelphia.

Jour. Geol.—The Journal of Geology. A semi-quarterly Magazine of Geology and related Sciences. Chicago.

Jour. Geol. Soc. Tokyo.—The Journal of Geological Society of Tokyo. Tokyo.

Jour. Internat. Anat.—Journal international d'anatomie et de physiologie. (See Internat. Jour. Anat. Physiol.)

Jour. Linn. Soc. Zool.—Journal of Linnean Society: Zoology. London.

Jour. Liverp. Geol. Assoc.—Liverpool Geological Association: Journal. Liverpool.

Jour. Mamm.—Journal of Mammalogy. Published quarterly by American Society of Mammalogists. Baltimore.

Jour. Mar. Biol. Assoc. U. K.—Journal of Marine Biological Association of the United Kingdom. Plymouth.

Jour. Morphol.—Journal of Morphology. Later called Journal of Morphology and Physiology. Philadelphia.

Jour. Ornith.—Journal für Ornithologie. Deutsches Centralorgan für die gesammte Ornithologie. Leipzig.

Jour. Phys. Chim. Hist. nat.—Journal de Physique, de Chimie et d'Histoire naturelle. Paris.

Jour. Proc. Roy. Soc. N. S. Wales.—Journal and Proceedings of Royal Society of New South Wales. Sidney.

Jour. Roy. Geol. Soc. Ireland.—Journal of Royal Geological Society of Ireland. Dublin, London.

Jour. Roy. Micr. Soc.—Journal of Royal Microscopical Society. London.

Jour. Victoria Inst.—Journal of transactions of Victoria Institute, or Philosophical Society of Great Britain. London.

Jour. Wash. Acad. Sci.—Journal of Washington Academy of Sciences. Washington.

Jour. Zool. Paris.—Journal de Zoologie. Paris.

Jour. Zool. Res.—Journal of Zoological Research. London.

K. svenska Vetensk. Akad. Handl.—Kongliga svenska Vetenskapsakademiens. Upsala, Stockholm.

Kansas City Rev. Sci. Indust.—The Kansas City Review of Science and Industry. Kansas City, Missouri.

Kansas Univ. Quart.—Kansas University Quarterly. Lawrence.

Kansas Univ. Sci. Bull.—The Kansas University Science Bulletin. Lawrence.

Kent Scient. Inst. Misc. Pap.—Kent Scientific Institute, Miscellaneous Papers. Grand Rapids.

Knowl. Scient. News.—Knowledge and Scientific News. London.

Knowledge.—An illustrated magazine of Science. London.

Korresp.-Bl. deutsch. Ges. Anthrop.—Korrespondenzblatt der deutschen Gesellschaft für Anthropologie, Ethnologie und Urgeschichte. Braunschweig.

Korresp.-Bl. Ver. Riga.—Korrespondenzblatt des Naturforscher-Vereins. Riga.

La Géographie.—Bulletin de la Société de Géographie. Paris.

La Nature.—Revue des Sciences. Paris.

Lancet.—The Lancet. A journal of British and foreign medicine, surgery, etc. London.

L'Anthrop. Paris.—L'Anthropologie. Paris.

Le Naturaliste.—Revue illustrée des sciences naturelles. Paris.

Leopoldina.—Amtliches Organ der kaiserlichen Leopoldino-Carolinischen deutschen Akademie der Naturforscher. Halle.

L'Institut.—Journal des Académies et Sociétés scientifiques de la France et de l'étranger. Paris.

Lloyd's Nat. Hist. Ser.—Lloyd's Natural History Series. Edited by Bowler Sharpe. London.

Lond. Edinb. Dublin Philos. Mag.—The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science. London.

Lond. Edinb. Philos. Mag.—The London and Edinburgh Philosophical Magazine and Journal of Science.

Lond. Med. Reposit.—London Medical Repository. London.

Los Angeles Mus. Hist. Sci. Publ.—Publications of the Los Angeles County Museum of History, Science and Art. Los Angeles.

Lund. Univ. Årsskr.—Lunds Universitets Årsskrift. Lund. (See also Acta Univ. Lund.)

Mag. Nat. Hist.—The Magazine of Natural History. London.

Magyar Föld. int. evkön.—A Magyar Kiralyi Földtani intézet evkönyve. (Annals of the Hungarian Royal Geological Bureau.) Budapest.

Marine Biol. Lab. Woods Hole, Lectures.—Marine Biological Laboratory of Woods Hole. Lectures. Boston, London.

Maryland Geol. Surv.—Maryland Geological Survey. Baltimore.

Math. naturw. Ber. Ungarn.—Mathematische und naturwissenschaftliche Berichte aus Ungarn, etc. Leipzig.

McClure's Mag.—McClure's Magazine. New York.

Med. Phys. Jour. Lond.—Medical and Physical Journal. London.

Med. Record, N. Y.—The Medical Record. A semi-monthly Journal of medicine and surgery. New York.

Med. Reposit. N. Y.—The Medical Repository. New York.

Med. Times and Gazette.—Medical Times and Gazette. London.

Meddelelser om Grönland.—Copenhagen.

Mél. biol.—Mélanges biologiques. (Reprints from Bulletin Acad. St. Petersburg.)

Mém. Acad. Sci. Belgique.—Mémoires de l'Académie des Sciences et des Beaux-Arts de Belgique. Bruxelles.

Mém. Acad. Sci. France.—Mémoires de l'Académie des Sciences de l'Institut de France. Paris.

Mém. Acad. Sci. Lett. Montpellier.—Mémoires de la Section de l'Académie des Sciences et Lettres de Montpellier.

Mém. Acad. Sci. Lyon.—Mémoires de l'Académie des Sciences, Belles-Lettres et Arts de Lyon. Lyon.

Mém. Acad. Sci. St. Pétersb.—Zapiski imperatorskoi akademii nauk. (Mémoires de l'Académie impériale des Sciences de Saint-Pétersbourg.) St. Pétersbourg.

Mém. Acad. Sci. Toulouse.—Mémoires de l'Académie des Sciences de Toulouse. Toulouse.

Mem. Accad. Agric. Verona.—Memorie della Accademia d'Agricoltura, Commercio ed Arti. Verona.

Mem. Accad. Lincei.—Atti della R. Accademia dei Lincei. Memorie della classe di Scienze fisiche, mathematiche e naturali. Roma.

Mem. Accad. Pont. Lincei.—Memorie della Pontificia Accademia dei nuovi Lincei. Roma.

Mem. Accad. Sci. Bologna.—Memorie della R. Accademia delle Scienze dell'Instituto di Bologna. Bologna.

Mem. Accad. Sci. Torino.—Memorie della Reale Accademia delle Scienze di Torino.

Mem. Amer. Acad. Arts, Sci.—Memoirs of American Academy of Arts and Sciences. Cambridge, Mass.

Mem. Amer. Mus. Nat. Hist.—Memoirs of American Museum of Natural History. New York.

Mem. Boston Soc. Nat. Hist.—Memoirs of Boston Society of Natural History. Boston.

Mem. Brooklyn Inst. Arts, Sci.—The Museum of Brooklyn Institute of Arts and Sciences. Memoirs of Natural Sciences. Brooklyn.

Mem. Calif. Acad. Sci.—Memoirs of California Academy of Sciences. San Francisco.

Mem. Carnegie Mus.—Memoirs of Carnegie Museum. Pittsburgh.

Mém. Com. Géol. St. Pétersbourg.—Mémoires du Comité Géologique. St. Pétersbourg.

Mem. Conn. Acad. Sci.—Memoirs of Connecticut Academy of Arts and Sciences. New Haven.

Mém. Cour. Acad. Belgique.—Mémoires couronnés et Mémoires des Savants étrangers publiés par l'Académie Royale des Sciences des Lettres et des Beaux-Arts de Belgique. Bruxelles.

Mem. Geol. Surv. Eng. Wales.—Memoirs of Geological Survey. England and Wales. London.

Mem. Geol. Surv. India.—Memoirs of Geological Survey of India. Palæontologia Indica. Calcutta.

Mem. Geol. Surv. N. S. Wales.—Memoirs of Geological Survey of New South Wales. Sydney.

Mem. Geol. Surv. U. K.—Memoirs of the Geological Survey of the United Kingdom. London.

Mem. Geol. Surv. Victoria.—Victoria. Department of Mines. Memoirs of Geological Survey of Victoria. Melbourne.

Mem. Ist. Geol. Univ. Padova.—Memorie dell' Istituto Geologico della R. Università di Padova. Italy.

Mem. Ist. Venezia.—Memorie del Reale Istituto Veneto di Scienze, Lettere e Arti. Venezia.

Mem. Johns Hopkins Univ.—Memoirs from Biological Laboratory of Johns Hopkins University. Baltimore.

Mem. Manchester Soc.—Memoirs and Proceedings of Manchester Literary and Philosophical Society. Manchester.

Mem. Mus. Comp. Zool.—Memoirs of Museum of Comparative Zoology at Harvard College. Cambridge, Mass.

Mém. Mus. hist. nat. Belgique.—Mémoires du Musée royal d'histoire naturelle de Belgique. Bruxelles.

Mém. Mus. hist. nat. Paris.—Mémoires du Muséum d'histoire naturelle. Paris.

Mem. N. Y. Acad. Sci.—New York Academy of Sciences. Memoirs. New York.

Mem. N. Y. State Mus.—Memoirs of New York State Museum. Albany.

Mem. Nat. Acad. Sci. Washington.—Memoirs of National Academy of Sciences. Washington.

Mem. Peabody Acad. Sci.—Memoirs of Peabody Academy of Sciences. Salem.

Mem. Queensl. Mus.—Memoirs of Queensland Museum. Brisbane.

Mém. Soc. acad. Boulogne.—Mémoires de la Société académique de Boulogne-sur-mer. Boulogne-sur-mer.

Mém. Soc. belge Géol.—Bulletin de la Société belge de Géologie, de Paléontologie et d'Hydrologie. (Consists of Procès-verbaux and Mémoires.) Bruxelles.

Mém. Soc. géol. Belgique.—Annales de la Société géologique de Belgique. (Consists of Bulletin and Mémoires.) Liége.

Mém. Soc. géol. France.—Mémoires de la Société géologique de France. Paris.

Mém. Soc. géol. France, Pal.—Mémoires de la Société géologique de France. Paléontologie. Paris.

Mém. Soc. géol. Nord.—Mémoires de la Société géologique du Nord. Lille.

Mém. Soc. hist. nat. Genève.—Mémoires de la Société de physique et d'histoire naturelle de Genève.

Mem. Soc. ital. Sci.—Memorie di matematica e di fisica della Società italiana delle Scienze. Napoli.

Mem. Soc. ital. Sci. Nat.—Memorie della Società italiana di Scienze naturali. Milano.

Mém. Soc. Linn. Nord France.—Mémoires de la Société Linnéenne du Nord de la France. Amiens.

Mém. Soc. Linn. Normandie.—Mémoires de la Société Linnéenne de Normandie. Paris.

Mém. Soc. Nat. Nouv. Russ.—Mémoires de la Société des Naturalistes de la Nouvelle-Russie. Odessa.

Mém. Soc. Natural. Kiew.—Mémoires de la Société des Naturalistes de Kiew. Kiew.

Mém. Soc. Natural. Moscou.—Nouveaux Mémoires de la Société impériale des Naturalistes de Moscou. Moscou.

Mém. Soc. pal. Suisse.—See Abh. schweiz. pal. Ges.

Mém. Soc. Sci. Agr. Lille.—Mémoires de la Société des Sciences de l'Agriculture et des Arts de Lille.

Mém. Soc. Sci. Hainaut.—Mémoires et Publications de la Société des Sciences, des Arts et des Lettres du Hainaut. Mons.

Mém. Soc. Sci. Nat. Neuchâtel.—Mémoires de la Société des Sciences Naturelles de Neuchâtel. Neuchâtel.

Mém. Soc. zool. France.—Mémoires de la Société zoologique de France. Paris.

Mem. Univ. Calif.—Memoirs of University of California. Berkeley.

Metrop. Mag.—Metropolitan Magazine. New York.

Missouri Bur. Geol. Mines.—Missouri Bureau of Geology and Mines. Rolla.

Mitt. Akad. Wiss. Berlin.—Mathematische und naturwissenschaftliche Mittheilungen aus den Sitzungsberichten der königlich-preussischen Akademie der Wissenschaften zu Berlin.

Mitt. Anthrop. Ges. Wien.—Mittheilungen der anthropologischen Gesellschaft in Wien.

Mitt. Geol. Ges. Wien.—Mittheilungen der geologischen Gesellschaft in Wien. Wien.

Mitt. Geol. Landesanst. Elsass-Loth.—Mittheilungen der geologischen Landesanstalt von Elsass-Lothringen. Strassburg.

Mitt. Jahrb. Ungar. Geol. Reichsanst.—Mittheilungen aus dem Jahrbuche der ungarischen geologischen Reichsanstalt. Budapest.

Mitt. med. Facultät kais.-japan. Univ. Tokio.—Mittheilungen aus der medicinischen Facultät der kaiserlich-japanischen Universität zu Tokio. Tokio.

Mitt. Mus. Dresden.—Mittheilungen aus dem königlichen mineralogisch-geologischen und praehistorischen Museum in Dresden. Leipzig.

Mitt. Mus. Naturk. Berlin.—Mittheilungen aus der zoologischen Sammlung des Museums für Naturkunde in Berlin.

Mitt. Nat.-Kab. Stuttgart.—Mittheilungen aus dem königlichen Naturalien-Kabinet zu Stuttgart. Stuttgart.

Mitt. naturf. Ges. Bern.—Mittheilungen der naturforschenden Gesellschaft in Bern. Bern.

Mitt. naturf. Ges. Zürich.—Mittheilungen der naturforschenden Gesellschaft in Zürich. Zürich.

Mitt. Zool. Stat. Neapel.—Mittheilungen aus der zoologischen Station zu Neapel. Berlin.

Mon. U. S. Geol. Surv.—Monographs of United States Geological Survey. Washington.

Monatsber. Akad. Wiss. Berlin.—Monatsberichte der k. p. Akademie der Wissenschaften zu Berlin.

Monatsh. naturw. Unterr.—Monatshefte für den naturwissenschaftlichen Unterricht aller Schulgattungen. Leipzig.

Monatsschr. Ohrenheilk.—Monatsschrift für Ohrenheilkunde sowie für Kehlkopf-Nasen-Rachen-Krankheiten. Berlin.

Month. Amer. Jour. Geol.—Monthly American Journal of Geology and Natural Science. Philadelphia.

Month. Micr. Jour.—The Monthly Microscopical Journal. London.

Morphol. Arbeit.—Morphologische Arbeiten. Jena.

Morphol. Jahrb.—Morphologisches Jahrbuch: eine Zeitschrift für Anatomie und Entwickelungsgeschichte. Leipzig.

Münch. Med. Wochenschr.—Münchener Medizinische Wochenschrift. Organ für amtliche und praktische Ärzte. München.

Mus. Graphic.—Museum Graphic. Los Angeles.

N. A. Fauna.—U. S. Department of Agriculture, Division of Ornithology and Mammalogy. North American Fauna. Washington.

N. Car. Geol. Econ. Surv.—North Carolina Geological and Economic Survey. Raleigh.

N. Y. Times Mag.—Magazine of Sunday issue of New York Times. New York.

N. Zeal. Geol. Surv.—New Zealand Geological Survey. Wellington.

Nat. Geogr. Mag.—National Geographic Magazine. New York.

Nat. Hist.—Natural History. (Continuation of Journal of American Museum of Natural History.) New York.

Nat. Hist. Rev.—Natural History Review. Published quarterly. Dublin and London.

Nat. Sci.—Natural Science. A monthly review of Scientific Progress. London.

Nat. Sci. Prog.—Natural Science Progress. London.

Naturalist.—The Naturalist. A monthly journal of Natural History for north of England. Leeds and London.

Naturalista Sicil.—Il Naturalista Siciliano. Organo della Società Siciliana di Scienze Naturali. Palermo.

Naturaliste canad.—Naturaliste canadien. Quèbec.

Nature.—Nature: a weekly illustrated journal of Science. London.

Nature (La).—La Nature. Revue des Sciences. Paris.

Naturw. Rundschau.—Naturwissenschaftliche Rundschau. Braunschweig.

Naturw. Wochenschr.—Naturwissenschaftliche Wochenschrift. Jena.

Naturwiss. Berlin.—Naturwissenschaften. Wochenschrift für die Fortschritte der Naturwissenschaft, der Medizin und der Technik. Berlin.

Natuurk. Tijdschr. Nederl. Ind.—Natuurkundig Tijdschrift voor Nederlandsch-Indie. Batavia.

Natuurk. Verhand. Haarlem.—Natuurkundige Verhandelingen van de Hollandsche Maatschappig der Wetenschappen te Haarlem. Harlem.

Nautilus.—The Nautilus. Philadelphia.

Neb. Geol. Surv.—Nebraska Geological Survey. Lincoln.

Nederl. Bijdr. Anat.—See Petrus Camper.

Neue Denk. Schweiz. Ges. Naturw.—See Denk. Schweiz. Ges. Naturw. Zürich. Same as Nouveaux Mémoires de la Société helvétique des Sciences naturelles. Zürich.

Neues Jahrb. Min. Geogn. Geol.—Neues Jahrbuch für Mineralogie, Geognosie und Petrefactenkunde. Heidelberg, Stuttgart.

Neues Jahrb. Min. Geol. Pal.—Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie. Stuttgart.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd.—Beilage-Band of the Neues Jahrbuch für Mineralogie, etc. Stuttgart.

Norske Selsk. Skr.—Det Kongelige Norske Videnskabers Selskabs Skrifter. Trondhjem.

Notizbl. Ver. geol. Landesanst. Darmstadt.—Notizblatt des Vereins für Erdkunde und der grossh.-geologischen Landesanstalt zu Darmstadt. Darmstadt.

Nouv. Ann. Mus. hist. nat. Paris.—Nouvelles Annales du Muséum d'histoire naturelle. Paris.

Nouv. Arch. Mus. hist. nat.—Nouvelles Archives du Muséum d'histoire naturelles. Paris.

Nouv. Mém. Acad. Sci. Bruxelles.—Nouveaux Mémoires de l'Académie Royale des Sciences et Belles-Lettres de Bruxelles.

Nouv. Mém. Soc. Helvét. Sci. Nat.—See Denk. Schweiz. Ges. Naturw.

Nouv. Mém. Soc. Nat. Moscou.—Nouveaux Mémoires de la Société Imp. des Naturalistes de Moscou. Moscou.

Nova Acta Acad. Leop. Carol.—See Acta Acad. Leop.-Carol.

Nova Acta Acad. Sci. Petropol.—Nova Acta Academiæ Scientiarum Imperialis Petropolitanæ. St. Petersburg.

Novi Comm. Acad. Sci. Inst. Bonon.—Novi Commentarii Academiæ Scientiarum Instituti Bononensis. Bologna.

Novit. Zoolog.—Novitates Zoologicæ. A journal of Zoology. Tring.

Nyt Mag. Naturv.—Nyt Magazin för Naturvidenskaberne. Christiana.

Occ. Papers Bost. Soc. Nat. Hist.—Occasional Papers of Boston Society of Natural History. Boston.

Occ. Papers Calif. Acad. Sci.—Occasional Papers of California Academy of Sciences. San Francisco.

Occ. Papers Mus. Zool. Univ. Mich.—Occasional Papers of Museum of Zoology, University of Michigan. Ann Arbor.

Öfv. Akad. Forh.—Öfversigt af k. Vetenskaps-Akademiens. Förhandlingar. Upsala.

Ohio Naturalist.—The Ohio Naturalist. Published by Biological Club of the Ohio State University. Columbus.

Ornith. Centralbl.—Ornithologisches Centralblatt. Organ für Wissenschaft und Praxis. Beiblatt zum Journal für Ornithologie. Leipzig.

Ornith. Jahrb.—Ornithologisches Jahrbuch. Organ für das palaearktische Faunengebiet. Hallein.

Ornith. Monatsber.—Ornithologische Monatsberichte; herausgegeben von Dr. A. Reichenow. Berlin.

Ornith. Monatsschr. Magdeburg.—Ornithologische Monatsschrift. Deutscher Verein zum Schutze der Vogelwelt. Magdeburg.

Ottawa Naturalist.—The Ottawa Naturalist. The Transactions of Ottawa Field Naturalists' Club. Ottawa.

Ov. Danske Selsk.—Oversigt over det kongelige Danske Videnskabernes Selskabs Forhandlinger. Copenhagen. Same as Danske Vidensk. Selsk. Forsh. Overs.

Overland Monthly.—San Francisco.

Palaeobiol.—Palaeobiologica. Wien and Leipzig.

Palaeont. Abh.—Palaeontologische Abhandlungen. Jena.

Palæont. Bull.—Palæontological Bulletins. Issued by E. D. Cope. Philadelphia.

Palaeont. Hungarica.—Palaeontologia Hungarica. Budapest.

Palaeont. Ind.—Palaeontologia Indica. Calcutta.

Palaeont. ital.—Palaeontographia italica. Memorie di Palaeontologia. Pisa.

Palaeont. Sinica.—Palaeontologia Sinica. Geological Survey of China. Pekin.

Palaeont. Zeitschr.—Palaeontologische Zeitschrift. Organ der palaeontologischen Gesellschaft. Berlin.

Palaeontogr.—Palaeontographica. Beiträge zur Naturgeschichte der Vorzeit. Stuttgart.

Palæontogr. Soc. Mon.—Palæontographical Society Monographs. London.

Paléont. franç.—Paléontologie française ou description des fossiles de la France. Paris.

Pan-Amer. Geol.—The Pan-American Geologist. Des Moines.

Pap. Mich. Acad. Sci. Arts.—Papers of Michigan Academy of Science, Arts and Letters. Michigan University.

Pap. Nat. Hist. Soc. Wisc.—Occasional Papers of Natural History Society of Wisconsin. Milwaukee.

Pap. Peabody Mus. Amer. Archæol.—Papers of Peabody Museum of American Archæology and Ethnology. Cambridge.

Petrus Camper, Bijdr. Anat.—Petrus Camper, Nederlandsche Bijdragen tot de Anatomie. Haarlem.

Phil. Mag. Jour. Sci.—The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science. London.

Phil. Trans. Ray Soc.—Philosophical Transactions of the Ray Society. London.

Phil. Trans. Roy. Soc. Lond.—Philosophical Transactions of Royal Society of London. Series B. London.

Phila. Med. and Phys. Jour.—Philadelphia Journal of Medical and Physical Sciences. Philadelphia.

Physis.—Revista de la Sociedad Argentina Naturales. Buenos Aires.

Pop. Sci.—Popular Science. Formerly and later called Popular Science News. New York.

Pop. Sci. Month.—The Popular Science Monthly. New York.

Pop. Sci. News.—See Pop. Sci.

Pop. Sci. Review.—The Popular Science Review. A quarterly, etc. London.

Princeton Univ. Exped. Patagonia.—Reports of Princeton University Expedition to Patagonia. Princeton and Stuttgart.

Proc. Acad. Nat. Sci. Phila.—Proceedings of Academy of Natural Sciences of Philadelphia. Philadelphia.

Proc. Akad. Wet. Amsterdam.—Proceedings of Section of Sciences. Koninklijke Akademie van Wetenschappen. Amsterdam.

Proc. Amer. Acad. Arts Sci.—Proceedings of American Academy of Arts and Sciences. Boston.

Proc. Amer. Assoc. Adv. Sci.—Proceedings of American Association for Advancement of Science. Washington.

Proc. Amer. Micros. Soc.—Proceedings of American Microscopical Society. Washington.

Proc. Amer. Philos. Soc.—Proceedings of American Philosophical Society. Philadelphia.

Proc. Biol. Soc. Wash.—Proceedings of Biological Society of Washington. Washington.

Proc. Birmingh. Nat. Hist. Soc.—Proceedings of Birmingham Natural History and Philosophical Society. Also cited as Proc. Birmingham Philos. Soc. Birmingham.

Proc. Bost. Soc. Nat. Hist.—Proceedings of Boston Society of Natural History. Boston.

Proc. Calif. Acad. Sci.—Proceedings of California Academy of Sciences. Zoology, Geology. San Francisco.

Proc. Cambridge Philos. Soc.—Proceedings of Philosophical Society, Cambridge. Cambridge.

Proc. Canad. Inst.—Proceedings of Canadian Institute. Toronto.

Proc. Col. Mus. Nat. Hist.—Proceedings of Colorado Museum of Natural History. Denver.

Proc. Col. Sci. Soc.—Proceedings of Colorado Scientific Society. Denver.

Proc. Davenport Acad. Sci.—Proceedings of Davenport Academy of Natural Sciences. Davenport.

Proc. Delaware Co. Inst. Sci.—Proceedings of Delaware County (Penn.) Institute of Science. Media.

Proc. Dorset Nat. Hist. Antiquar. Field Club.—Proceedings Dorset Natural History and Antiquarian Field Club. Dorchester.

Proc. Elliott Soc. Nat. Hist.—Proceedings of Elliott Society of Natural History. Charleston, S. C.

Proc. Essex Inst.—Proceedings of Essex Institute. Salem, Mass.

Proc. Geol. Assoc.—Proceedings of Geologists' Association. London.

Proc. Geol. Soc. Lond.—Abstracts of Proceedings of Geological Society of London. London.

Proc. Indiana Acad. Sci.—Proceedings of Indiana Academy of Science. Indianapolis.

Proc. Internat. Zool. Congr.—Proceedings of International Zoological Congress. Places of meeting change.

Proc. Iowa Acad. Sci.—Proceedings of Iowa Academy of Sciences. Des Moines.

Proc. Linn. Soc. Lond.—Proceedings of Linnean Society of London. London.

Proc. Linn. Soc. N. S. Wales.—Proceedings of Linnean Society of New South Wales. Sydney.

Proc. Liverp. Geol. Soc.—Proceedings of Liverpool Geological Society. Liverpool.

Proc. Lyc. Nat. Hist. N. Y.—Proceedings of Lyceum of Natural History of New York. New York.

Proc. Manchester Soc.—Proceedings of Manchester Field Naturalists' and Archæologists' Society. Manchester.

Proc. Nat. Acad. Sci.—Proceedings of National Academy of Sciences of United States of America. Washington.

Proc. Neb. Acad. Sci.—Proceedings of Nebraska Academy of Sciences. Lincoln.

Proc. N. Eng. Zool. Club.—Proceedings of New England Zoological Club. Cambridge, Mass.

Proc. Nova Scot. Inst.—Proceedings and Transactions of Nova-Scotian Institute of Science. Halifax.

Proc. Philos. Soc. Glasgow.—Proceedings of Philosophical Society of Glasgow. Glasgow.

Proc. Rochester Acad. Sci.—Proceedings of Rochester Academy of Science. Rochester.

Proc. Roy. Dublin Soc.—The Scientific Proceedings of Royal Dublin Society. Dublin.

Proc. Roy. Instn. G. Brit.—Proceedings of Royal Institution of Great Britain. London.

Proc. Roy. Irish Acad.—Proceedings of Royal Irish Academy. Section B: Biological, geological and chemical sciences. Dublin.

Proc. Roy. Phys. Soc. Edinb.—Proceedings of Royal Physical Society of Edinburgh. Edinburgh.

Proc. Roy. Soc. Edinb.—Proceedings of Royal Society of Edinburgh. Edinburgh.

Proc. Roy. Soc. Lond.—Proceedings of Royal Society of London. Series B. London.

Proc. Roy. Soc. Med.—Proceedings of Royal Society of Medicine. London.

Proc. Roy. Soc. Queensland.—Proceedings of Royal Society of Queensland. Brisbane.

Proc. Roy. Soc. Victoria.—Proceedings of Royal Society of Victoria. Melbourne.

Proc. So. Calif. Acad. Sci.—Proceedings of Southern California Academy of Sciences. Los Angeles.

Proc. U. S. Nat. Museum.—Proceedings of United States National Museum. Washington.

Proc. Wash. Acad. Sci.—Proceedings of Washington Academy of Sciences. Washington.

Proc. Wyom. Penn. Geol. Soc.—Proceedings of Wyoming (Penn.) Historical and Geological Society. Wyoming, Penn.

Proc. Yorksh. Geol. Polyt. Soc.—Proceedings of Yorkshire Geological and Polytechnic Society. Halifax, Leeds.

Proc. Zool. Soc. Lond.—Proceedings of scientific meetings of the Zoological Society of London. London.

Prometheus.—Prometheus. Illustrierte Wochenschrift. Berlin.

Pub. Field Columb. Mus. Geol.—See Field Columb. Mus. Geol.

Publ. Ann. Paléont. Paris.—Publications des Annales de Paléontologie. Paris.

Publ. Carnegie Instn. Wash.—Carnegie Institution of Washington publications. Washington.

Quart. Bull. Univ. Oklahoma.—Quarterly Bulletin of University of Oklahoma. Norman.

Quart. Jour. Geol. Soc.—The Quarterly Journal of Geological Society. London.

Quart. Jour. Micr. Sci.—The Quarterly Journal of Microscopical Science. London.

Quart. Jour. Sci. Lit. Art.—Quarterly Journal of Science, Literature and Art. London.

Quart. Rev. Biol.—The Quarterly Review of Biology. Baltimore.

Rad. Jugoslav. Akad.—Rad. Jugoslavenske Akademije Znanosti i Umjetnosti. Zagrab.

Rec. Albany Mus.—Records of the Albany Museum. Grahamstown.

Rec. Austral. Mus.—Records of the Australian Museum. Sydney.

Rec. Geol. Surv. India.—Records of Geological Survey of India. Calcutta.

Rec. Geol. Survey N. S. Wales.—Records of Geological Survey of New South Wales. Sydney.

Rec. Indian Mus.—Records of Indian Museum. A Journal of Indian Zoology. Calcutta.

Records of the Past.—Washington.

Rend. Accad. Sci. Napoli.—Rendiconti delle R. Accademia delle Scienze fisiche e matematiche. Napoli.

Rend. Reale Ist. Lombardo.—Rendiconti del Reale Istituto Lombardo. Milano.

Rep. Amer. Assoc. Geol. Naturalists.—Reports of meetings of Association of American Geologists and Naturalists.

Rep. Amer. Mus. Nat. Hist.—The American Museum of Natural History. Annual reports. New York.

Rep. Brit. Assoc. Adv. Sci.—Report of British Association for the Advancement of Science. London.

Rep. Bur. Ethnol.—Annual report of Bureau of Ethnology. Washington.

Rep. Bur. Mines, Toronto.—Report of Bureau of Mines, Ontario. Toronto.

Rep. Bur. Stat. Geol. Ind.—Report of Bureau of Statistics and Geology. Indianapolis.

Rep. Calif. State Min. Bur.—Report of California State Mining Bureau. Sacramento.

Rep. Carnegie Mus.—Carnegie Museum. Annual report of director. Pittsburgh.

Rep. Colorado Mus. Nat. Hist.—Annual report of Colorado Museum of Natural History. Denver.

Rep. Field Mus. Chicago.—Annual report of director of Field Museum of Natural History. Chicago.

Rep. Fish. Board Scotland.—Annual report of Fishery Board for Scotland. Edinburgh.

Rep. Florida Geol. Surv.—Florida State Geological Survey. Annual reports. Tallahassee.

Rep. Forest, Fish, Game Comm. N. Y.—Annual report of Forest, Fish and Game Commissioner of New York. Albany.

Rep. Geol. Agric. Miss.—Report of Geology and Agriculture of the State of Mississippi. Jackson.

Rep. Geol. Nat. Hist. Surv. Canada.—Annual reports of Geological and Natural History Survey and Museum of Canada. Ottawa.

Rep. Geol. Nat. Hist. Surv. Minn.—The Geological and Natural History Survey of Minnesota. Annual report. Minneapolis.

Rep. Geol. Nat. Hist. Surv. Okla.—Geological and Natural History Survey of Oklahoma. Reports.

Rep. Geol. Surv. Ark.—Annual reports of Geological Survey of Arkansas. Little Rock.

Rep. Geol. Surv. Canada.—Geological Survey of Canada. Annual report of Geological and Natural History Survey and Museum of Canada. Ottawa.

Rep. Geol. Surv. Georgia.—Reports of Geological Survey of Georgia. Atlanta.

Rep. Geol. Surv. Kansas.—The State Geological Survey of Kansas. Reports. Lawrence.

Rep. Geol. Surv. Kentucky.—Reports of Geological Survey of Kentucky. Lexington, Frankfort.

Rep. Geol. Surv. Louisiana.—Report on geology of Louisiana. Baton Rouge.

Rep. Geol. Surv. New Jersey.—Geological Survey of New Jersey. Annual report of the State Geologist. Trenton.

Rep. Geol. Surv. Texas.—Annual report of Geological Survey of Texas. Austin.

Rep. Geol. Surv. Vermont.—Report of State Geologist of Vermont. Burlington.

Rep. Harvard Coll.—Annual report of President of Harvard College. Cambridge.

Rep. Internat. Geogr. Congr.—Report of International Geographical Congress. Places of meetings change. See also Verhandlungen and Comptes-rendus.

Rep. Louisiana Sem.—Annual report of the Board of Supervisors of the Louisiana State Seminary of Learning and Military Academy.

Rep. Mich. Acad. Sci.—Annual Report of Michigan Academy of Science. Lansing.

Rep. N. Y. State Mus.—University of the State of New York. New York State Museum. Annual report of the Regents. Albany.

Rep. N. Y. Zool. Soc.—Annual report of New York Zoological Society. New York.

Rep. Ohio Acad. Sci.—Annual report of Ohio State Academy of Science. Columbus.

Rep. Peabody Mus. Harv.—Annual report of Peabody Museum of Harvard College. Cambridge.

Rep. Prov. Mus. Nat. Hist. Victoria.—Report of Provincial Museum of Natural History, British Columbia. Victoria.

Rep. 2d Norweg. Arct. Exped. Fram.—Report of Second Norwegian Arctic Expedition in the *Fram* 1898–1902. Christiania.

Rep. S. African Assoc. Adv. Sci.—Report of South African Association for Advancement of Science. Place of meetings changes.

Rep. Smithson. Instn.—Annual report of Board of Regents of Smithsonian Institution. Washington.

Rep. State Cab. N. Y.—Annual report of State Cabinet of New York. Albany.

Rep. State Geol. Mich.—Report of State Board of Geological Survey of Michigan. Lansing.

Rep. State Geologist, N. Y.—Report of State Geologist of New York. Albany.

Rep. U. S. Comm. Fish.—United States Commission of Fish and Fisheries. Report of the Commissioner. Washington.

Rep. U. S. Geol. Surv.—Annual report of United States Geological Survey to Secretary of the Interior. Washington.

Rep. U. S. Geol. Surv. Terrs. Hayden.—Annual reports of United States Geological and Geographical Surveys of Territories. F. V. Hayden. Washington.

Rep. U. S. Nat. Mus.—Annual reports of United States National Museum. Washington.

Rep. Yorksh. Philos. Soc.—Annual report of Yorkshire Philosophical Society. York.

Res. Bull. Univ. Okla.—Research Bulletin of State University of Oklahoma. Norman.

Résult. Voy. S. Y. Belg. Zool.—Résultats du Voyage du S. Y. *Belgica.* Zoologie. Antwerp.

Rev. Anthrop.—Revue d'Anthropologie. Paris.

Rev. biolog. Nord France.—Revue biologique du Nord de la France. Lille.

Rev. Mag. Zool.—Revue et Magazine de Zoologie pure et appliquée. Paris.

Rev. crit. Paléozool.—Revue critique de Paléozoologie. Paris.

Rev. gén. Sci. Paris.—Revue générale des Sciences pures et appliquées. Paris.

Rev. Géol. et Sci. conn.—Revue de Géologie et des Sciences connexes. Liége.

Rev. internat. Odont.—Revue internationale d'Odontologie. Paris.

Rev. Mus. La Plata.—Revista del Museo de La Plata. Buenos Aires.

Rev. Quest. sci.—Revue des Questions scientifiques. Publiée par la Société scientifique de Bruxelles. Bruxelles.

Rev. Scient. Paris.—Revue Scientifique. Paris.

Rev. suisse Zool.—Revue suisse de Zoologie. Annales de la Société zoologique suisse et du Musée d'Histoire naturelle, Genève. Genève.

Rev. Zool. Paris.—Revue Zoologique, par la Société Cuvierienne, 1838–1848. Paris.

Rev. Zool. Russe.—Revue Zoologique Russe. (The principal title is in Russian.) Moscou.

Revista Argent. Hist. Nat.—Revista Argentina de Historia Natural. Buenos Aires.

Revista cient. Mexicana.—Revista científica Mexicana. City of Mexico.

Revista Mus. Paulista.—Revista do Musen Paulista. São Paulo.

Riv. ital. Pal.—Rivista italiana di Paleontologia. Parma.

Roy. Irish Acad. Cunningh. Mem.—Royal Irish Academy. Cunningham Memoirs. Dublin.

Samml. Geol. Reichsmus. Leiden.—Sammlungen des geologischen Reichsmuseums in Leiden. Leiden.

Sci. Conspectus.—Science Conspectus. Boston.

Sci. Progress.—Science Progress. A monthly review of current scientific investigations. London.

Sci. Rec.—Science Record. A monthly magazine. Illustrated. Boston.

Sci. Rep. Tohoku Imp. Univ.—The Science reports of Tohoku Imperial University. Sendai, Japan.

Science.—Science: a weekly journal. New York, Lancaster.

Scient. Amer.—Scientific American. New York.

Scient. Amer. Monthly.—Scientific American Monthly. New York.

Scient. Amer. Suppl.—Scientific American. Supplement. New York.

Scient. Memoirs of Huxley.—The Scientific Memoirs of T. H. Huxley, edited by M. Foster and E. R. Lankester. London.

Scient. Monthly.—The Scientific Monthly. Garrison, New York.

Schrift. naturf. Ges. Danzig.—Schriften der naturforschenden Gesellschaft in Danzig. Danzig.

Schrift. phys.-ökonom. Ges. Königsb.—Schriften der physikalisch-ökonomischen Gesellschaft zu Königsberg in Preussen. Königsberg.

Schrift. Ver. Verbr. naturw. Kenntn.—Schriften des Vereins zur Verbreitung naturwissenschaftlicher Kenntnisse. Wien.

Scient. News.—Scientific News. New York.

Scribner's Mag.—Scribner's Magazine. Published monthly with illustrations. New York.

Semons Zool. Forschungsr.—Zoologische Forschungsreisen in Australien und dem malayischen Archipel, ausgeführt in den Jahren 1891–1893 von Richard Semon. Published in Denkschr. med. naturw. Ges. Jena. Jena.

Senckenbergiana.—Mitteilungen der naturforschenden Gesellschaft in Frankfurt-am-M.

Sitz.-Ber. Akad. Wiss. Berlin.—Sitzungsberichte der königlich-preussischen Akademie der Wissenschaften zu Berlin. Berlin.

Sitz.-Ber. Akad. Wiss. München.—Sitzungsberichte der mathematisch-physikalischen Classe der k. b. Akademie der Wissenschaften zu München. München.

Sitz.-Ber. Akad. Wiss. Wien.—Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der kaiserlichen Akademie der Wissenschaften. Wien.

Sitz.-Ber. böhm. Ges. Wiss.—Sitzungsberichte der k. böhmischen Gesellschaft der Wissenschaften. Mathematisch-naturwissenschaftliche Classe. Prag.

Sitz.-Ber. Ges. Morphol. Physiol. München.—Sitzungsberichte der Gesellschaft für Morphologie und Physiologie in München. München.

Sitz.-Ber. Ges. naturf. Freunde, Berlin.—Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin. Berlin.

Sitz.-Ber. Heidelb. Akad. Wiss.—Sitzungsberichte der Heidelberger Akademie der Wissenschaften. Mathematisch-naturwissenschaftliche Klasse. Abteilung B. Biologische Wissenschaften. Heidelberg.

Sitz.-Ber. Naturf. Ges. Dorpat.—Sitzungsberichte der Naturforscher-Gesellschaft zu Dorpat.

Sitz.-Ber. Naturf. Ges. Leipzig.—Sitzungsberichte der Naturforschenden Gesellschaft zu Leipzig.

Sitz.-Ber. phys.-med. Ges. Würzb.—Sitzungsberichte der physikalischen Gesellschaft zu Würzburg.

Skr. Vid.-selsk. Kristiania.—Skrifter utgit av Videnskapsselskapet i Kristiania. Mat.-naturv. Kl.

Smithson. Contrib. Knowl.—Smithsonian Contributions to Knowledge. Washington.

Smithson. Institn. Explor.—Explorations and field-work of the Smithsonian Institution. Washington.

Smithson. Instn. Publ.—Smithsonian Institution Publications. Washington.

Smithson. Misc. Coll.—Smithsonian Miscellaneous Collections. Washington.

Smithson. Misc. Coll. Quart.—Smithsonian Miscellaneous Collections. Quarterly issue. Washington.

S. Afric. Jour. Sci.—South African Journal of Science. Cape Town.

Special Bull. U. S. Nat. Mus.—Smithsonian Institution. United States National Museum. Special Bulletin. Washington.

Stand. Nat. Hist.—The Standard Natural History. Edited by John Sterling Kingsley. Boston.

Stanf. Univ. Publ. Univ. Ser.—Leland Stanford University Publications. University Series. Stanford University.

Stanf. Univ. Publ. Univ. Ser. Biol. Sci.—Stanford University Publications. University Series. Biological Sciences. Stanford University.

Stud. Lab. Univ. Nebraska.—Studies from Zoological Laboratory. The University of Nebraska. Lincoln.

Stud. Univ. Nebraska.—University Studies; published by University of Nebraska. Lincoln.

Stud. Univ. Toronto.—University of Toronto Studies. Toronto.

Summ. Rep. Geol. Surv. Canada.—Summary Report. Geological Survey of Canada. Ottawa.

Sunset Mag.—Sunset Magazine. San Francisco.

Surg. Gynecol. Obstet.—Surgery, Gynecology and Obstetrics. Chicago.

Svenska Vet. Akad. Handl.—Kongl. svenska Vetenskaps Akademiens Handlingar. Stockholm.

Tijdschr. natuurl. Geschied. Physiol.—Tijdschrift voor natuurlijke Geschiedenis en Physiologie. Amsterdam.

Tijdschr. Nederl. Dierk. Vereen.—Tijdschrift der Nederlandsche Dierkundige Vereeniging. Leiden.

Tilloch's Philos. Mag.—The Philosophical Magazine. By Alexander Tilloch. London.

Tilloch's Philos. Mag. and Jour.—Tilloch's Philosophical Magazine and Journal. London.

Trans. Acad. Sci. St. Louis.—Transactions of Academy of Science of St. Louis. St. Louis.

Trans. Amer. Inst. Mg. Engrs.—Transactions of American Institute of Mining Engineers. New York.

Trans. Amer. Micr. Soc.—Transactions of American Microscopical Society. Buffalo.

Trans. Amer. Philos. Soc.—Transactions of American Philosophical Society. Philadelphia.

Trans. Bohem. Acad. Sci.—Transactions of Bohemian Imperial Francis Joseph Academy of Science, etc. [Rozpravy České Akademie, etc.] Prague.

Trans. Canad. Inst.—Transactions of Canadian Institute. Toronto.

Trans. Chicago Acad. Sci.—Transactions of Chicago Academy of Sciences. Chicago.

Trans. Chicago Pathol. Soc.—Transactions of Chicago Pathological Society. Chicago.

Trans. Conn. Acad. Arts, Sci.—Transactions of Connecticut Academy of Arts and Sciences. New Haven.

Trans. Edinb. Field Nat. Micr. Soc.—Transactions of Edinburgh Field Naturalists' and Microscopical Society. Edinburgh.

Trans. Edinb. Geol. Soc.—Transactions of Edinburgh Geological Society. Edinburgh.

Trans. Geol. Soc. S. Africa.—Transactions of Geological Society of South Africa. Johannesburg.

Trans. Geol. Soc. Glasgow.—Transactions of Geological Society of Glasgow. Glasgow.

Trans. Geol. Soc. Lond.—Transactions of Geological Society of London. London.

Trans. Ill. Acad. Sci.—Transactions of Illinois State Academy of Sciences. Springfield.

Trans. Ill. Nat. Hist. Soc.—Transactions of Illinois Natural History Society. Springfield.

Trans. Kansas Acad. Sci.—Transactions of Kansas Academy of Science. Topeka.

Trans. Linn. Soc. Lond.—The Transactions of Linnæan Society of London. London.

Trans. Linn. Soc. N. Y.—Transactions of Linnæan Society of New York. New York.

Trans. Maryland Acad. Sci.—Transactions of Maryland Academy of Science. Baltimore.

Trans. N. Staffords. Field Club.—Transactions of North Staffordshire Naturalists' Field Club and Archæological Society. England.

Trans. N. Y. Acad. Sci.—Transactions of New York Academy of Sciences. New York.

Trans. Norfolk (Eng.) Soc.—Transactions of Norfolk and Norwich Naturalists' Society. Norwich.

Trans. Nova Scot. Inst. Sci.—Proceedings and Transactions of Nova Scotia Institute of Science. Halifax.

Trans. Odont. Soc. G. Brit.—Transactions of Odontological Society of Great Britain. London.

Trans. Ottawa Sci. Soc.—Transactions of Ottawa Literary and Scientific Society. Ottawa.

Trans. Roy. Canad. Inst.—Transactions of Royal Canadian Institute. Toronto.

Trans. Roy. Dublin Soc.—The Scientific Transactions of Royal Dublin Society. Dublin.

Trans. Roy. Irish Acad.—The Transactions of Royal Irish Academy. Dublin.

Trans. Roy. Soc. Canada.—Proceedings and Transactions of Royal Society of Canada. Ottawa.

Trans. Roy. Soc. Edinb.—Transactions of Royal Society of Edinburgh. Edinburgh.

Trans. Roy. Soc. S. Africa.—Transactions of Royal Society of South Africa. Cape Town.

Trans. S. African Philos. Soc.—Transactions of S. African Philosophical Society. Cape Town.

Trans. Texas Acad. Sci.—Transactions of Texas Academy of Science. Austin.

Trans. Vassar Bros. Inst.—Transactions of Vassar Brothers Institute. Poughkeepsie.

Trans. Wagner Inst. Sci.—Transactions of Wagner Free Institute of Science of Philadelphia. Philadelphia.

Trans. Wisconsin Acad. Sci.—Transactions of Wisconsin Academy of Sciences, Arts and Letters. Madison.

Trans. Zool. Soc. Lond.—Transactions of Zoological Society of London. London.

Trav. Sci. Univ. Rennes.—Travaux scientifiques de la Société de l'Université de Rennes. France.

Trav. Soc. Nat. Sci. Kasan.—Travaux de la Société des Naturalistes de l'Université Imp. de Kasan. Russia.

Trav. Soc. Naturalistes St. Pétersb.—Travaux de la Société Imp. des Naturalistes de St. Pétersbourg.

Trav. Stat. zool. Wimereux.—Travaux de la Station zoologique de Wimereux. Paris.

Tufts Coll. Stud.—Tufts College Studies. Science Series. Tufts College, Mass.

U. S. Explor. Exp.—U. S. Exploring Expedition, 1838–42. Under Capt. C. Wilkes. Washington.

U. S. Geog. Geol. Explor. Surv. west 100 *Merid.*—Reports upon the geographical and geological explorations and surveys west of the one hundredth meridian. Geo. M. Wheeler. Washington.

U. S. Geol. Surv. Profess. Pap.—United States Geological Survey. Professional Papers. Washington.

U. S. Geol. Surv. Water-supp. Pap.—U. S. Geological Survey. Water-supply Papers. Washington.

Univ. Calif. Publ. Amer. Arch. Ethn.—University of California Publications in American Archæology and Ethnology. Berkeley.

Univ. Calif. Publ. Zool.—University of California Publications in Zoology. Berkeley.

Univ. Colorado Stud.—University of Colorado Studies. Boulder.

Univ. Durham Philos. Soc.—Proceedings of University of Durham Philosophical Society. Newcastle-on-Tyne.

Univ. Geol. Surv. Kansas.—The University Geological Survey of Kansas. Lawrence.

Univ. Ill. Biol. Mon.—Illinois Biological Monographs. University of Illinois. Urbana.

Univ. Ill. Bull.—University of Illinois Bulletin. Urbana.

Univ. Missouri Bull.—University of Missouri Bulletin. Science Series. Columbia.

Univ. Nebraska Stud.—University Studies. University of Nebraska. Lincoln.

Univ. Okla. Bull.—University of Oklahoma Bulletin. Norman.

Univ. Penn. Dept. Archæol.—University of Pennsylvania. Department of Archæology and Palæontology. Philadelphia.

Univ. Toronto Stud.—University of Toronto Studies. Toronto.

Verh. Akad. Amsterdam.—Verhandelingen der koninklijke Akademie van Wetenschappen. Amsterdam.

Verh. Anat. Ges.—Verhandlungen der anatomischen Gesellschaft (published with Anatomischer Anzeiger as Ergänzungshefte). Jena.

Verh. Berlin Ges. Anthrop.—Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte. Berlin.

Verh. deutsch. zool. Ges.—Verhandlungen der deutschen zoologischen Gesellschaft. Leipzig, Berlin.

Verh. Geol. Mijnb. Gen. (Geol. Ser.).—Verhandelingen van het geologisch-mijnbouwkundig Genootschap voor Nederland en Kolonien. 's-Gravenhage.

Verh. geol. Reichsanst.—Verhandlungen der kaiserlich-königlichen geologischen Reichsanstalt. Wien.

Verh. Ges. deutsch. Naturf.—Verhandlungen der Gesellschaft deutscher Naturforscher und Ärzte. Leipzig.

Verh. Ges. Erdkunde, Berlin.—Verhandlungen der Gesellschaft für Erdkunde zu Berlin. Berlin.

Verh. internat. Zool.-Kongr.—Verhandlungen des internationalen Zoologen-Kongresses. See also Proceedings and Comptes-rendus. Title and place of publication change.

Verh. Leop.-Carol. Akad.—Verhandlungen der kais. Leopoldinisch-Carolinischen deutschen Akademie der Naturforscher. Halle.

Verh. Min. Ges. St. Petersb.—Verhandlungen der russisch-kaiserlichen mineralogischen Gesellschaft zu St. Petersburg. Petrograd.

Verh. nat.-med. Ver. Heidelb.—Verhandlungen des naturhistorisch-medizinischen Vereins zu Heidelberg.

Verh. naturf. Ges. Basel.—Verhandlungen der naturforschenden Gesellschaft in Basel. See Actes Soc. helvét. Sci. nat. Basel.

Verh. naturh. Ver. Rheinl.—Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande, Westphalen. Bonn.

Verh. Naturw. Ver. Karlsruhe.—Verhandlungen des naturwissenschaftlichen Vereins in Karlsruhe. Germany.

Verh. phys.-med. Ges. Würzb.—Verhandlungen der physikalisch-medicinischen Gesellschaft in Würzburg. Germany.

Verh. schweiz. naturf. Ges.—Verhandlungen der schweizerischen naturforschenden Gesellschaft. Aarau.

Verh. Siebenb. Ver. Naturw.—Verhandlungen und Mittheilungen des Siebenbürgischen Vereins für Naturwissenschaften. Hermannstadt.

Verh. zool.-bot. Ges. Wien.—Verhandlungen der k. k. zoologisch-botanischen Gesellschaft in Wien. Wien.

Versl. Med. Akad. Amsterdam.—Verslagen en Mededeelingen der koninklijke Akademie van Wetenschappen. Afdeeling Natuurkunde. Amsterdam.

Versl. Wis. Nat. Afd. Akad. Wet.—Verslag van de gewonne Vergaderingen der Wis- en Natuurkundige Afdeeling der Wetenschappen. Amsterdam.

Vet.-Akad. Årsbok. Stockh.—Kongl. Svenska Vetenskaps-Akademiens Årsbok. Stockholm.

Vet. Jour.—The Veterinary Journal. London.

Vet. Record.—The Veterinary Record. London.

Vid. Medd. nat. For. Kjöbenh.—Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjöbenhavn. Copenhagen.

Vierteljahrsschr. naturf. Ges. Zürich.—Vierteljahrsschrift der naturforschenden Gesellschaft in Zürich.

Virginia Geol. Surv.—Virginia Geological Survey. Reports and Bulletins. Charlottesville.

Voigt's Mag. Naturk.—Magazin für den neuesten Zustand der Naturkunden. Jena, Weimar.

W. Virginia Geol. Surv.—West Virginia Geological Survey. Morgantown.

Warszawa Spraw. Tow. Nauk.—Sprawozdanie Towarzystwa Naukowego Warszawskiego. Warsaw.

Wis. Geol. Nat. Hist. Surv.—Wisconsin Geological and Natural History Survey. Madison.

Wiss. Ergebn. zool. Exped. Baikal.—Wissenschaftliche Ergebnisse einer zoologischen Expedition nach dem Baikal. Kiew and St. Petersburg.

Wiss. Rundschau.—Wissenschaftliche Rundschau. Zeitschrift für die allgemeinwissenschaftliche Fortbildung des Lehrers. Leipzig.

Würzb. naturw. Zeitschr.—Würzburger naturwissenschaftliche Zeitschrift, herausgegeben von der physikalisch-medicinischen Gesellschaft. Würzburg.

Yale Museum Bull.—Yale Museum Bulletin. New Haven.

Yale Review.—New Haven.

Zeitschr. Anat. Entwickelungsges.—Zeitschrift für Anatomie und Entwickelungsgeschichte. Abt. 1 of Zeitschr. gesamt. Anat. München, Berlin.

Zeitschr. deutsch. Geol. Ges.—Zeitschrift der deutschen geologischen Gesellschaft. Berlin.

Zeitschr. Ethnol.—Zeitschrift für Ethnologie. Berlin.

Zeitschr. gesamt. Naturw.—Zeitschrift für die gesamten Naturwissenschaften. Berlin.

Zeitschr. gesamte Anat., Ergeb.—Zeitschrift für die gesamte Anatomie. Abt. 3. Ergebnisse der Anatomie und Entwickelungsgeschichte. München, Berlin.

Zeitschr. indukt. Abstamm. Vererbungsl.—Zeitschrift für induktive Abstammungs- und Vererbungslehre. Berlin.

Zeitschr. Morphol. Anthrop.—Zeitschrift für Morphologie und Anthropologie. Stuttgart.

Zeitschr. Morphol. Ökol. Tiere.—Zeitschrift für Morphologie und Ökologie der Tiere. Abt. A. der Zeitschrift für wissenschaftliche Biologie. Berlin.

Zeitschr. Naturw.—Zeitschrift für Naturwissenschaften. Leipzig.

Zeitschr. organ. Physik.—Zeitschrift für die organische Physik. Halle.

Zeitschr. Tiermedizin.—Zeitschrift für Tiermedizin. Jena.

Zeitschr. Veterinärk.—Zeitschrift für Veterinärkunde mit besonderer Berücksichtigung der Hygiene. Berlin.

Zeitschr. wiss. Zool.—Zeitschrift für wissenschaftliche Zoologie. Leipzig.

Zoe.—Zoe, a biological journal. San Francisco.

Zool. Anz.—Zoologischer Anzeiger, zugleich Organ der deutschen zoologischen Gesellschaft. Leipzig.

Zool. Beitr. Breslau.—Zoologische Beiträge. Breslau.

Zool. Bull.—Zoological Bulletin. Boston.

Zool. Centralbl.—Zoologisches Centralblatt. Leipzig.

Zool. Erebus and Terror.—Zoology of the voyage of H. M. S. *Erebus* and *Terror* . . . during the years 1839 to 1843. London.

Zool. Jahrb. Anat.—Zoologische Jahrbücher. Abteilung für Anatomie und Ontogenie der Tiere. Jena.

Zool. Jahrb. Syst.—Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere. Jena.

Zool. Jahrb. Zool.—Zoologische Jahrbücher. Abteilung für allgemeine Zoologie und Physiologie der Tiere. Jena.

Zool. Jahresber.—Zoologischer Jahresbericht. Herausgegeben von der zoologischen Station zu Neapel. Berlin.

Zool. Rec.—The Zoological Record. London.

Zoologica.—Zoologica. Originalabhandlungen aus dem Gesamtgebiete der Zoologie. Stuttgart.

Zoologica, N. Y.—Published by New York Zoological Society. New York.

Zoologist.—The Zoologist. London.

SECOND BIBLIOGRAPHY AND CATALOGUE OF THE FOSSIL VERTEBRATA OF NORTH AMERICA

By Oliver Perry Hay

BIBLIOGRAPHY

Abbott, Charles C. 1881 A

Primitive industry of the native races of the northern Atlantic seaboard of America.

8vo., i-vii+1-560 pages, 429 text-figs.

—— 1883 A

A recent find in the Trenton gravels.

Proc. Bost. Soc. Nat. Hist., xxii, 96-104.

Abel, O. 1889 A

Untersuchungen über die fossilen Platanistiden des Wiener Beckens.

Denk. Akad. Wiss. Wien, lxviii, 1-36, pls. i-iv, 1 text-fig.

The bibliography comprises 60 titles.

—— 1900 A

Untersuchungen über die fossilen Platanistiden des Wiener Beckens.

Denk. Akad. Wiss. Wien, lxviii, 839-874, pls. i-iv, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, ii, Ref., 135-138; Geol. Centralbl., ii, 381.

—— 1901 A

Les dauphins longirostres du Boldérien (Miocène supérieur) des environs d'Anvers.

Mém. Mus. hist. nat. Belgique, i, 1-95, pls. i-x, 17 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, i, Ref., 549-553; Verh. geol. Reichsanst. Wien, 1901, 322; Rev. crit. Paléozool., vi, 2.

—— 1901 B

Über die Hautbepanzerung fossiler Zahnwale.

Beitr. Pal. Geol. Oesterr-Ung., xiii, 1901, 297-317, pls. xx, xxi and text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, ii, Ref., 138-139; Nature, lxiv, 652-653; Geol. Centralbl., iii, 556.

Abel, O.—Continued 1901 C

Bericht über die Fortsetzung der Untersuchungen an den fossilen Zahnwalen aus dem Boldérien von Antwerpen im Musée royal d'histoire naturelle de Belgique in Brüssel.

Verh. geol. Reichsanst. Wien, 1901, 316-317.

—— 1902 A

Les dauphins longirostres du Boldérien (Miocène supérieur) des environs d'Anvers.

Mem. Mus. hist. nat. Belgique, ii, 99-190, pls. xi-xviii and 3 text-figs.

Abstract in Rev. crit. Paléozool., viii, 153.

—— 1902 B

Die Ursache der Asymmetrie des Zahnwalschädels.

Sitz.-Ber. Akad. Wiss. Wien, cxi, Abth. 1, 510-526, 1 plate.

Abstract in Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 128.

—— 1904 A

Die Sirenen der mediterranen Tertiärbildungen Oesterreichs.

Abh. geol. Reichsanst. Wien, xix, Heft 2, i-vi+1-223 pages, pls. i-vii, text-figs. 1-26. Literature and lists of genera and species.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 504-516; Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 184; Rev. crit. Paléozool., ix, 119-120.

—— 1904 B

Über das Aussterben der Arten.

Verh. internat. Zool.-Kongr., ix, Vienna, 739-748.

Abel, O.—Continued 1905 A

Les odontocètes du Boldérien (Miocène supérieur) d'Anvers.

Mem. Mus. hist. nat. Belgique, III, 1-155, pls. i-vii, 27 text-figs.

For summaries see Neues Jahrb. Min. Geol. Pal., 1907, I, 130-138; Rev. crit. Paléozool., X, 203.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 184-185.

—— 1905 B

Sur les causes de l'extinction des ichthyosauriens et des mosasauriens.

Bull. Soc. belge Geol., XVIII, Proc.-verb., 202-207.

—— 1905 C

Eine Stammtype der Delphiniden aus dem Miocän der Halbinsel Taman.

Jahrb. geol. Reichsanst. Wien, LV, 375-392, 4 text-figs.

Abstract in Geol. Centralbl., XIII, 582-583.

—— 1905 D

Über *Halitherium bellunense*, eine Übergangsform zur Gattung *Metaxytherium*.

Jahrb. geol. Reichsanst. Wien, LV, 393-398, 1 text-fig.

Abstract in Geol. Centralb., XIII, 583.

—— 1905 E

Die phylogenetische Entwicklung des Cetaceengebisses und die systematische Stellung der Physeteriden.

Verh. deutsch. zool. Ges., XV, 84-96.

Brief abstract in Nature, LXXIII, 1906, 516.

—— 1906 A

Die Milchmolaren der Sirenen.

Neues Jahrb. Min. Geol. Pal., 1906, II, 50-60, 1 text-fig.

Abstracts in Geol. Centralbl., XIV, 54; Rev. crit. Paléozool., XI, 1907, 2; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 167; Sci. Progress, I, 455.

—— 1906 B

Ueber den als Beckengürtel von *Zeuglodon* beschriebenen Schultergürtel eines Vogels aus dem Eocän von Alabama.

Centralbl. Min. Geol. Pal., 1906, 450-458, 4 text-figs.

Abstracts in Geol. Centralbl, XIV, 268; Sci. Progress, II, 513; Rev. crit. Paléozool, XI, 7; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 165.

—— 1906 C

Fossile Flugfische.

Jahrb. geol. Reichsanst. Wien, LVI, 1-88, pls. i-iii, 13 text-figs.

Abstracts in Geol. Centralbl., XII, 517-520; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 159-160.

Abel, O.—Continued 1907 A

Der Anpassungstypus von *Metriorhynchus*.

I: Die wichtigsten Anpassungstypen der schwimmenden Wirbeltiere.

II: Richtigstellung der Irrtümer in der Arthaberschen Rekonstruktion von *Metriorhynchus jaekeli* E. Schmidt.

Centralbl. Min. Geol. Pal., 1907, 225-235, 2 text-figs.

Abstract in Geol. Centralbl., XII, 600.

—— 1907 B

Die Aufgaben und Ziele der Paläozoologie.

Verh. zool.-bot. Ges. Wien, LVII (67-78).

—— 1907 C

Über die Bedeutung der neuen Fossilfunde im Alttertiär Ägyptens für die Geschichte der Säugetiere.

Verh. zool.-bot. Ges. Wien, LVII (78-82).

—— 1907 D

Die Lebensweise der altpalaeozoischen Fische.

Verh. zool.-bot. Ges. Wien, LVII (158-168), 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 157.

—— 1907 E

Die Anfänge des Säugetierstammes.

Verh. zool.-bot. Ges. Wien, LVII (249-250).

—— 1907 F

Bau und Lebensweise der Flugsaurier.

Verh. zool.-bot. Ges. Wien, LVII (253-254).

—— 1907 G

Die Stammesgeschichte der Meeressäugetiere.

Meereskunde, Jahrg. i, Heft 4, 1-36, 27 figs.

Abstract in Jahresber. Anat. Entwickl. (N. F.), XIII, pt. 3, 173-175.

—— 1908 A

The genealogical history of the marine mammals.

Rep. Smithson. Instn. for 1907, 473-496, 27 text-figs.

Translation of an article published in 1907 in Meereskunde, I, Heft 4, Berlin.

Abstract in Rev. crit. Paléozool., XIII, 150.

—— 1908 B

Die Morphologie der Hüftbeinrudimente der Cetaceen.

Denk. Akad. Wiss. Wien, LXXXI, 139-195, 56 text-figs.

The bibliography includes 130 titles.

This paper was issued in 1907.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, ii, Ref., 113-117; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 126, 127; Sci. Progress, ii, 512.

Abel, O.—Continued 1908 C

Neuere Studien über die Systematik und Stammesgeschichte der Halbaffen und über den Fund eines angeblichen Vorfahren des Menschen in Südamerika, *Tetraprothomo argentinus* Ameghino.

Verh. zool.-bot. Ges. Wien, LVIII (35-38).

—— 1908 D

Angriffswaffen und Verteidigungsmittel fossiler Wirbeltiere.

Verh. zool-bot. Ges. Wien, LVIII (207-217), 4 text-figs.

—— 1908 E

Die Anpassungsformen der Wirbeltiere an das Meeresleben.

Schrift. Ver. Verbr. naturw. Kenntn. Wien, XLVIII, 395-422, 6 text-figs.

Abstract in Geol. Centralbl., XV, 602.

—— 1908 F

Die Anwendung der Röntgenstrahlen in der Paläontologie.

Verh. zool.-bot. Ges. Wien, LVIII (232-236).

—— 1908 G

Discussion regarding ichthyosaurs.

Verh. zool.-bot. Ges. Wien, LVIII (42-44).

—— 1909 A

Cetaceenstudien. I Mitteilung: Das Skelett von *Eurhinodelphis cocheteuxi* aus dem Obermiozän von Antwerpen.

Sitz.-Ber. Akad. Wiss. Wien, CXVIII, Abth. I, 241-253, with 1 plate.

Abstracts in Geol. Centralbl., XIV, 338-339; Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 117-118; Nature, LXXXII, 16; Sci. Progress, IV, 663.

—— 1909 B

Cetacceenstudien. II Mitteilung: Der Schädel von *Saurodelphis argentinus* aus dem Pliozän Argentiniens.

Sitz.-Ber. Akad. Wiss. Wien, CXVIII, Abth. I, 255-272, pl. i, 1 text-fig.

Abstracts in Geol. Centralbl., XIV, 339; Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 118.

—— 1909 C

Neuere Anschauungen über den Bau und die Lebensweise der Dinosaurier.

Verh. zool.-bot. Ges. Wien, LIX (117-121, 122).

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 301; Sci. Progress, IV, 667.

—— 1909 D

Konvergenz und Deszendenz.

Verh. zool.-bot. Ges. Wien, LIX (221-230).

Abel, O.—Continued 1909 E

Was verstehen wir unter monophyletischer und polyphyletischer Abstammung?

Verh. zool.-bot. Ges. Wien, LIX (243-249, 253, 254, 255).

—— 1909 F

Das Zeitalter der Reptilienherrschaft.

Schrift. Ver. Verbr. naturw. Kenntn. Wien, XLIX, 451-481.

—— 1910 A

Über die allgemeinen Prinzipien der paläontologischen Rekonstruktion.

Verh. zool.-bot. Ges. Wien, LX (141-146).

—— 1910 B

Diskussion über Riesenwuchs.

Verh. zool.-bot. Ges. Wien, LX (185-187).

—— 1910 C

Die Vorfahren der Vögel und ihre Lebensweise.

Verh. zool.-bot. Ges. Wien, LX (230-231).

—— 1910 D

Die Rekonstruktion des *Diplodocus*.

Abh. zool.-bot. Ges. Wien, V, Heft 3, 1-60, pls. i-iii, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 148-149; Nature, LXXXV, 110; Rev. crit. Paléozool., XIV, 227.

—— 1910 E

Kritische Untersuchungen über die paläogenen Rhinocerotiden Europas.

Abh. geol. Reichesanst. Wien, XX, Heft 3, 1-52, pls. i, ii.

For a summary see Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 461-469.

Abstract in Sci. Progress, VI, 561.

—— 1911 A

Die Vorfahren der Vögel und ihre Lebensweise.

Verh. zool.-bot. Ges. Wien, LXI, 144-191, 7 text-figs.

Review in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 470-475.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 156; Sci. Progress, VI, 566.

—— 1912 A

Kämpfe, Verletzungen und Kampfanpassungen bei fossilen Wirbeltieren.

Verh. zool.-bot. Ges. Wien, LXII (53-55).

—— 1912 B

Über die verschiedenen Ursachen des gehäuften Vorkommens von Tierleichen in Gesteinen.

Verh. zool.-bot. Ges. Wien, LXII (57-61).

Abel, O.—Continued 1912 C

Wissenschaftliche Ergebnisse der Wiener Universitätsreise nach Griechenland. I: Fossilfunde in Pikermi.

Verh. zool.-bot. Ges. Wien, LXII (61-63), 1 text-fig.

—— 1912 D

Verfehlte Anpassungen bei fossilen Wirbeltieren.

Zool. Jahrb., Suppl. XV, i, 597-609, with 2 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 143-145.

—— 1912 E

Über den Erwerb des Flugvermögens.

Schrift. Ver. Verbr. naturw. Kenntn., LII, 215-236, 2 text-figs.

Abstract in Geol. Centralbl., XIX, 42.

—— 1912 F

Grundzüge der Palaeobiologie der Wirbeltiere.

i-xvi+1-708 pages, 470 illustrations. 8vo. Stuttgart.

Reviews in Science (2), XXXV, 1912, 341-342; Zeitschr. Morphol., Anthrop., XVI, 1913, 175-196; Naturwissenschaften, Berlin, II, 424-425; Rev. crit. Paléozool., XVI, 73.

Abstract in Geol. Centralbl., XX, 582-585; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 15.

—— 1912 G

Cetaceensstudien. III: Rekonstruktion des Schädels von *Prosqualodon australe* Lyd. aus dem Miozän Patagoniens.

Sitz.-Ber. Akad. Wiss. Wien, CXXI, Abt. i, 57-75, pls. i-iii, 1 text-fig.

Abstracts in Geol. Centralbl., XX, 525-526; Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 135.

Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 21.

—— 1913 A

Die eocänen Sirenen der Mittelmeerregion. Erster Teil: Der Schädel von *Eotherium aegyptiacum*.

Palaeontogr., LIX, 289-360, pls. XXX-XXXIV, 5 text-figs.

Abstracts in Rev. crit. Paléozool., XVII, 71; Geol. Centralbl., XIX, 525.

—— 1913 B

Säugetiere (Paläontologie).

Handwörterbuch Naturwissenschaften (Gustav Fischer, Jena), VIII, 695-759, figs. 1-122.

Abel, O.—Continued 1913 C

Die Vorfahren der Bartenwale.

Denk. Akad. Wiss. Wien, XC, 155-224, pls. i-xii, 19 text-figs.

There are abundant citations of the literature.

Abstract in Geol. Zentralbl., XXIII, 316.

—— 1914 A

Die vorzeitlichen Säugetiere.

8vo., i-vii+1-309 pages, 2 tables, 250 text-figs. Jena, Gustav Fischer.

Abstracts in Zeitschr. Morph., Anthrop., XVII, 693-694; Science (n.s.), XL, 1914, 787-788; Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 280-281.

—— 1914 B

Die Tiere der Vorwelt.

i-iv+1-88 pages, 31 illustrations. Aus Natur und Geisteswelt. 399 Bändchen.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 318-319.

—— 1914 C

Paläontologie und Paläozoologie.

Abstammungslehre: System., Palaeont., Biogeog. (Hertwig and Wettstein), IV, 303-395, 8 text-figs.

The bibliography contains 19 titles.

—— 1914 D

Neuere Wege phylogenetischer Forschung.

Naturwiss. Berlin, II, 25-30, 5 figs.

—— 1915 A

Die Paläozoologie in Forschung und Lehre.

Naturwiss. Berlin, III, 413-419.

—— 1916 A

Die Dinosaurier und Ornithosaurier Nordamerikas.

Naturwiss. Berlin, IV, 469-474; 494-498, 11 figs.

—— 1919 A

Die Stämme der Wirbeltiere.

Berlin and Leipzig. 1919.

8vo., i-xviii+1-914 pages, 669 text-figs. Reviews in Centralbl. Min. Geol. Pal., 1921, 637-638. Geol. Mag. LVIII, 45-46.

Abstracts in Geol. Zentralbl., XXVII, 183; Nature, CVI, 274.

—— 1919 B

Neue Reconstruktion der Flugsauriergattungen *Pterodactylus* und *Rhamphorhynchus*.

Naturwiss. Berlin, VII, 661-665, 7 figs.

—— 1920 A

Lehrbuch der Paläozoologie.

8vo., Jena, i-vii+1-500 pages, 700 figs. Review in Centralbl. Min. Geol. Pal., 1921, 638-640.

Abstract in Geol. Zentralbl., XXVII, 26-27.

Abel, O.—Continued 1920 B

Studien über die Lebensweise von *Chalicotherium*.

Acta Zool., I, 21-60, 14 text-figs.

The bibliography is in the form of foot-notes.

—— 1921 A

Die Methoden der paläobiologischen Forschung.

Pages 129-312, 129 figs. Extract from "Handbuch der biologischen Arbeitsmethod" published by Prof. Dr. Emil Abderhalden, Berlin.

Abstract in Geol. Zentralbl., XXVIII, 29.

—— 1922 A

Kritik der früheren Rekonstruktionen und neue Rekonstruction von *Trachodon*.

Palaeont. Zeitschr., IV, 134-146, 1 fig.

—— 1922 B

Desmostylus: ein mariner Multituberculate aus dem Miocän der nordpazifischen Küstenregion.

Anz. Akad. Wiss. Wien, 1922, No. 14, 1-3.

—— 1922 C

Lebensbilder aus der Tierwelt der Vorzeit.

8vo., Jena, i-viii+1-643 pages, 505 figs.

Abstract in Geol. Zentralbl., XXVIII, 90.

—— 1922 D

Die Schauzenverletzungen der Parasuchier und ihre biologische Bedeutung.

Palaeont. Zeitschr., V, 26-57, 10 figs.

Abstract in Geol. Zentralbl., XXXII, 122.

—— 1922 E

Desmostylus: ein mariner Multituberculate aus dem Miozän der nordpazifischen Küstenregion.

Acta Zool., III, 361-394, pls. i-iii, 5 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1924, II, 455.

—— 1922 F

Ueber wiederholten Wechsel der Körperformen in Laufe der Stammesgeschichte der Teleostomen.

Amsterdam Bijdr. Dierk., XXII (Feestnum. Max Weber), 73-87, 15 text-figs.

Bibliography in foot-notes.

Abel, O.—Continued 1923 A

Über einen Multituberculate aus dem Miozän der nordpacifischen Küstenregion.

Palaeont. Zeitschr., V, 213-225, 5 figs.

Followed by a discussion on the part of C. Wiman, E. Stromer, O. Jaekel and T. Edinger.

Abstract in Neues Jahrb. Min. Geol. Pal., 1924, II, 455.

—— 1923 B

Discussion on *Ichthyosauria*.

Palaeont. Zeitschr., V, 271.

—— 1924 A

Die neuen Dinosaurierfunde in der Oberkreide Canadas.

Naturwiss. Berlin, XII, 709-716, 12 figs.

—— 1924 B

Die Rekonstruction von *Palæotherium magnum* Cuvier.

Palaeont. Zeitschr., VI, 14-24, pl. ii, oleat, 2 text-figs.

—— 1925 A

Geschichte und Methode der Rekonstruction vorzeitlicher Wirbeltiere.

8vo., Jena, i-viii+1-327 pages, 225 figs.

Citations of literature in foot-notes.

—— 1925 B

On a skeleton of *Pterodactylus antiquus* from the lithographic shales of Bavaria, with remains of skin and musculature.

Amer. Mus. Novit., CXCII, 1-12, 4 figs.

—— 1926 A

Die Molarisierung der oberen Prämolaren von *Hyracodon nebrascensis* Leidy.

Palaeont. Zeitschr., VIII, 224-245, 3 figs.

In foot-notes are citations of the literature.

—— 1926 B

Amerikafahrt. Eindrücke, Beobachtungen und Studien eines Naturforschers auf eine Reise nach Nordamerika und Westindien.

8vo., Jena, i-x+1-462 pages, 273 figs.

—— 1926 C

Beiträge zu einer Theorie des knöchernen Schädels der Wirbeltiere.

Palaeont. Zeitschr., VIII, 43-44.

—— 1926 D

Morphologische Untersuchungen über die Griffelbeine der Pferde.

Anz. Akad. Wiss. Wien., LXIII, 63-64.

Abel, O.—Continued 1926 E

Neue Untersuchungen über *Desmostylus* einen Monotremen aus dem Tertiär der pazifischen Küstenregion.

Verh. zool.-bot. Ges. Wien, LXXIV, (134)-(138).

——, and H. J. **Cook** 1925 A

A preliminary study of early mammals in a new fauna from Colorado.

Proc. Colorado Mus. Nat. Hist., V, 33-36, figs. 1-4.

Adam, Walter 1830 A

On the osteological symmetry of the camel, *Camelus bactrianus*.

Trans. Linn. Soc. London (1), XVI (1833), 525-585.

—— 1854 A

On the osteological relations observable among a few species of the bovine family.

Trans. Linn. Soc. Lond. (2), XXI, 237-243.

Adams, Arthur 1854 A

A manual of natural history.

London, 1854. 8vo., i-viii+1-749 pages. Prepared with the assistance of W. B. Bakie and Charles Barron.

Adams, Charles C. 1902 A

Southeastern United States as a center of geographical distribution of flora and fauna.

Biol. Bull., III, 115-131.

—— 1902 B

Postglacial origin and migrations of the life of the northeastern United States.

Jour. Geog., I, 303-310, 352-357.

—— 1905 A

The postglacial dispersal of the North American biota.

Biol. Bull., IX, 53-71, 1 text-fig.

See also Rep. 8th Internat. Geogr. Congr., 1904, 623-637, with references to the literature.

Adams, Leverett Allen 1919 A

A memoir on the phylogeny of the jaw muscles in recent and fossil vertebrates.

Ann. N. Y. Acad. Sci., XXVIII, 51-166, pls. i-xiii and numerous text-figs.

The bibliography occupies pages 160-165. Abstracts in Rev. crit. Paléozool., XXV, 6; Geol. Zentralbl., XXVII, 221.

See **Gregory**, W. K., and L. A. **Adams**.

Adams, Lionel E. 1903 A

A contribution to our knowledge of the mole (*Talpa europæa*).

Mem. Manchester Soc., XLVII, No. 4, 1-39, 28 text-figs.

Adams, Michael F. 1807 A

Some account of a journey to the Frozen Sea, and the discovery of the remains of a mammoth.

Tilloch's Philos. Mag., XXIX, 141-153.

A French translation of this paper is to be found in Tilesius, 1815 A, 431-455.

Addison, William H. F., and J. L. **Appleton**, Jr. 1915 A

The structure and growth of the incisor teeth of the albino rat.

Jour. Morphol., XXVI, 43-96, 29 figs.

The bibliography presents 32 titles.

Adelmann, H. B. See **Kingsbury** and **Adelmann**.

Adelung, N. 1901 A

Über den jüngsten Fund einer Mammutleiche in Ostsibirien.

Globus, LXXX, 85-87.

Adloff, P. 1901 A

Zur Entwickelungsgeschichte des Zahnsystems von *Sus scrofa* domest.

Anat. Anz., XIX, 481-490, 6 text-figs.

—— 1901 B

Ueberzählige Zähne und ihre Bedeutung.

Deutsche Monatsschr. Zahnheilk., XIX, 219-226.

—— 1901 C

Noch Einiges zur Frage nach der Beurtheilung überzähliger Zähne nebst Bemerkungen über die regressiven Entwickelungsvorgänge im Zahnsystem der Säugethiere.

Deutsche Monatsschr. Zahnheilk., XIX, 419-426.

—— 1902 A

Zur Kenntniss des Zahnsystems von *Hyrax*.

Zeitschr. Morphol. Anthrop., V, 181-200, pls. iv, v.

—— 1903 A

Zur Frage nach der Entstehung der heutigen Säugethierzahnformen.

Zeitschr. Morphol. Anthrop., V, 357-382, pl. x, 5 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 300-302.

—— 1904 A

Ueber den Zahnwechsel von *Cavia cobaya*.

Anat. Anz., XXV, 141-147, 2 text-figs.

—— 1904 B

Über das Gebiss im Lichte der Entwickelungslehre.

Schrift. phys. ökonom. Ges. Köngsb., Sitz.-Ber., 54-55.

Adloff, P.—Continued 1905 A

Zur Entwickelung des Säugetiergebisses.

Anat. Anz., XXVI, 333-343.

—— 1906 A

Einige Besonderheiten des menschlichen Gebisses und ihre stammesgeschichtliche Bedeutung.

Zeitschr. Morphol. Anthrop., X, 106-121.
Appended is a bibliography of 29 titles.

—— 1907 A

Zur Frage der Konkreszenztheorie.

Jena. Zeitschr. Naturwiss., XLIII, 530-536.
For Dependorf's rejoinder see same volume, pages 802-808.

—— 1908 A

Die Differenzierung des Primatengebisses.

Zeitschr. Morphol. Anthrop., XI, 377-384.

—— 1908 B

Ausgestorbene Menschenaffen und ihre Beziehungen zum Menschen.

Schrift. phys. ökonom. Ges. Königsb., XLVIII, 113-116.

—— 1909 A

Zur Frage der Differenzierung des Primatengebisses.

Deutsche Monatsschr. Zahnheilk., XXVII, 444-449.

—— 1909 B

Überreste einer prälaktealen Zahnreihe beim Menschen.

Deutsche Monatsschr. Zahnheilk., XXVII, 828-832.

—— 1910 A

Zur Entwickelungsgeschichte des Nagetiergebisses.

Anat. Anz., XXXVII, 257-271, 76 text-figs.

—— 1910 B

Über den gegenwärtigen Stand der vergleichenden Morphologie des Zahnsystems der Säugetiere und des Menschen.

Ergebn. Ges. Zahnheilk., Jahrg. I, Heft 1, 226-280, 8 text-figs.

—— 1911 A

Über die Phylogenese des Primatengebisses und das Zukunftsgebiss des Menschen.

Zeitschr. Morphol. Anthrop., XIII, 505-532, pls. xvii, xviii, 1 text-fig.
Appended is a bibliography of 13 titles.

Adloff, P.—Continued 1912 A

Noch einmal die Bolk'sche Hypothese und die Differenzierung des Primatengebisses.

Zeitschr. Morphol., Anthrop., XV, 381-400, pls. x-xii, 1 text-fig.

—— 1913 A

Zur Frage der prälaktealen Anlagen.

Anat. Anz., XLIII, 236-238.

—— 1913 B

Ueber probleme der Gebissentwicklung.

Anat. Anz. Ergänzungsh., XLIV, 188-195.

—— 1913 C

Zur Entwicklungsgeschichte des menschlichen Zahnsystems nebst Bemerkungen zur Frage der prälaktealen Dentition, der sogenannten Konkreszenztheorie und der Entwicklung des Säugetiergebisses überhaupt.

Arch. mikr. Anat., LXXXII, 1-38, pls. i, ii, 5 text-figs.

—— 1913 D

Review of Bolk's Die Ontogenie der Primatenzähne (Bolk, L. 1913 A).

Naturwiss. Berlin, I, 869-870.

—— 1914 A

Zur Entwickelungsgeschichte des Cervidengebisses, ein Beitrag zur Frage der prälaktealen Dentition.

Anat. Anz., XLVI, 359-366, 15 text-figs.

—— 1915 A

Probleme der Gebissentwickelung.

Zeitschr. Morphol. Anthrop., XVII, 433-448, 1 text-fig.

—— 1916 A

Entwickelungsgeschichte des Zahnsystems von *Centetes ecaudatus*, nebst Bemerkungen zur Frage der Existenz einer präpermanenten Dentition.

Anat. Anz., XLIX, 593-600, 8 figs.
The bibliography contains 7 titles.

—— 1917 A

Zur Frage der Konkreszenztheorie.

Anat. Anz., L, 286-288.

—— 1917 B

Einige Bemerkungen über das Problem der Entstehung der Zahnform.

Anat. Anz., L, 348-354.

—— 1918 A

Die Beziehungen zwischen Reptilien, Beutler- und Plazentaliergebiss.

Anat. Anz., LI, 129-142, 7 figs.

Adloff, P.—Continued 1920 A

Über das Problem der Entstehung der Zahnform.

Anat. Anz., LIII, 175-191.

—— 1920 B

Die Ontogenie der Elefantengebiss.

Anat. Anz., LII, 534-540.

—— 1927 A

Das Gebiss des Menschen und der Anthropoiden und das Abstammungsproblem.

Zeitschr. Morphol. Anthrop., XXVI, 431-449, 7 figs.

The bibliography appears in foot-notes.

Adolphi, Hermann 1896 A

Über Variationen der Spinalnerven und der Wirbelsäule anurer Amphibien.

Morphol. Jahrb., XXV, 115-142, pl. viii.

The bibliography contains 12 titles.

—— 1899 A

Ueber die Wirbelsäule und den Brustkorb zweier Hunde.

Morphol. Jahrb., XXVII, 299-308, 1 text-fig.

—— 1922 A

Über den Brustkorb und die Wirbelsäule der Vögel.

Zeitschr. Anat. Entwicklungsges., Abt. I, LXV, 1-149, 328-481, 70 figs.

The bibliography occupies page 481.

Aeby, Chr. 1873 A

Ueber das Kiefergerüst der Vögel.

Arch. Anat. Physiol. Med., 1873, 699-705, pl. xii.

Ärnbäck-Christie-Linde, A. 1907 A

Der Bau der Soriciden und ihre Beziehungen zu andern Säugetieren.

Morphol. Jahrb., XXXVI, 463-514, 35 text-figs.

—— 1909 A

On intermediate forms among Chiroptera.

Zool. Anz., XXXIV, 572-582, 4 text-figs.

—— 1912 A

On the development of the teeth of the Soricidæ: an ontogenetical inquiry.

Ann. Mag. Nat. Hist. (8), IX, 601-625, pls. xviii, xix, 9 text-figs.

For correction of error see Ann. Mag. Nat. Hist. (8), X, 264.

—— 1912 B

Der Bau der Soriciden und ihre Beziehungen zu andern Säugetieren. II: Zur Entwicklungsgeschichte der Zähne. Ontogenie.

Morphol. Jahrb., XLIV, 201-296, pl. vi, 47 text-figs.

Agar, W. E. 1906 A

The development of the skull and visceral arches in *Lepidosiren* and *Protopterus.*

Trans. Roy. Soc. Edinb., XLV, 49-64, pls. i-iii.

—— 1907 A

The development of the anterior mesoderm, and paired fins with their nerves, in *Lepidosiren* and *Protopterus.*

Trans. Roy. Soc. Edinb., XLV, 611-639, 1 pl., 7 text-figs.

A bibliography of 36 titles is appended.

—— 1909 A

On an embryonic appendage of the claws of the *Amniota,* probably of an adaptive nature.

Anat. Anz., XXXV, 373-380, 7 figs.

There is a bibliography of 7 titles.

Agassiz, Alexander 1877 A

On the young stages of some osseous fishes. I: Development of the tail.

Proc. Amer. Acad. Arts Sci., XIII, 117-127, pls. i, ii, 2 text-figs.

Agassiz, L. 1832 A

Untersuchungen über die fossilen Fische der Lias-Formation.

Jahrb. Min. Geogn. Geol., 1832, 139-149.

—— 1833 A

Synoptische Übersicht der fossilen Ganoiden.

Neues Jahrb. Min. Geol. Pal., 1833, 470-481.

From his Recherches sur les Poissons fossiles, 1833, II, 1-18.

—— 1834 A

Abgerissene Bemerkungen über fossile Fische.

Neues Jahrb. Min. Geogn. Geol., 1834, 379-390.

—— 1835 B

Work of Agassiz on fossil fishes.

Edinb. New Philos. Jour., XIX, 331-346.

This is an anonymous review of Agassiz's work, with extensive quotations.

—— 1835 C

Sur un nouveau poisson fossile de Burdichouse.

L'Institut, III, 58.

An abstract of an address on *Megalichthys hibberti,* but without technical description.

—— 1835 D

Sur les poissons fossiles du calcaire de Burdichouse.

L'Institut, II, 189-190.

Abstract of a communication from Agassiz regarding fossil fishes. Presented by Mr. S. Hibbert.

Agassiz, L.—Continued 1835 E
[Remarks on *Lepisosteus*.]
L'Institut, III, 199.

—— 1835 F
Remarks on fossil fishes.
L'Institut, III, 253-254.
Quotation from L. Agassiz in a communication made by Professor Jameson.

—— 1835 G
Remarques détachées sur des poissons fossiles.
Bull. Soc. Natural. Moscou, VIII, 181-201.
Reprinted from Neues Jahrb. Min. Geogn. Geol., 1834, 379-390.

—— 1835 H
Coup d'oeil synoptique des ganoïdes fossiles.
Bull. Soc. Natural. Moscou, VIII, 202-233.
Extract from Recherches sur les poissons fossiles, II, 1-18. See also Neues Jahrb. Min. Geol. Pal., 1833, 470.

—— 1835 I
On a new classification of fishes, and on the geological distribution of fossil fishes.
Proc. Geol. Soc. Lond., pt. 2, 99-102.

—— 1835 J
On the anatomy of the genus *Lepisosteus*, with descriptions of two new species.
Proc. Zool. Soc. Lond., pt. 2, 1834, 119-120.

—— 1836 A
Views of the affinities and distribution of the fishes of the family Cyprinidæ.
Proc. Zool. Soc. Lond., pt. 3, 149-151.

—— 1836 B
Sur les principes d'une classification du règne animal en général et des mammifères en particulier.
L'Institut, Paris, IV, 24.

—— 1838 A
Über die Familie der Karpfen.
Arch. Naturges., IV, I, 73-82.

—— 1839 A
Fishes of the Old Red Sandstone.
Murchison's Silurian System, 589-606, pls. i, ii.
Quotations of remarks made by Agassiz.

—— 1839 B
Ichthyodorulites of the Upper Ludlow rock.
Murchison's Silurian System, 607-608.
Quotations of remarks made by Agassiz.

Agassiz, L.—Continued 1840 A
Remarques sur la structure des écailles des poissons.
Ann. Sci. Nat. (2), XIII, 58-61.

—— 1840 B
Nouvelles observations sur la structure des écailles des poissons.
Ann. Sci. Nat. (2), XIII, 62-63.

—— 1840 C
Observations sur la structure et le mode d'accroissement des écailles des poissons, et réfutation des objections de M. Mandl.
Ann. Sci. Nat. (2), XIV, 97-110, pls. iv, v ("iii, iv a").
See also C. R. Acad. Sci., Paris, X, 191-194; Froriep's Neue Notizen, XVIII, 33-41, with figs.

—— 1843 A
Report on the fossil fishes of the Devonian system, or Old Red Sandstone.
Rep. Brit. Assoc. Adv. Sci., 12th Meet., Manchester, 1842, 80-88.
See also L'Institut, XI, 1843, 14-16; Neues Jahrb. Min. Geol. Pal. 1843, 750-751; Biblioth. Univ. Geneve, XLIII, 1843, 353-369.

—— 1844 C
Notice sur la succession des poissons fossiles dans la série des formations géologiques.
Ann. Sci. Nat. (3), II, 251-271.

—— 1844 D
On the classification of fishes.
Edinb. New Philos. Jour., XXXVII, 132-143.

—— 1844 E
On fossil fishes. 1: Classification. 2: Illustrated by comparative anatomy. 3: Importance in geology.
Edinb. New Philos. Jour., XXXVII, 331-347.
This review, written probably by the editor, Robert Jameson, is a brief résumé of Agassiz' "Recherches sur les Poissons Fossiles."

—— 1845 B
Remarks on Professor Pictet's "Treatise on Palaeontology."
Edinb. New Philos. Jour., XXXIX, 295-302.

—— 1845 C
On fossil fishes, particularly those of the London clay.
Edinb. New Philos. Jour., XXXIX, 321-327; XL, 121-125, pl. vi.

—— 1848 B
Remarks on the petrifaction of *Mallotus villosus* in Iceland.
Proc. Bost. Soc. Nat. Hist., III, 42.

Agassiz, L.—Continued 1853 B
Extraordinary fishes from California, constituting a new family.
Amer. Jour. Sci. (2), XVI, 381-390.

—— 1854 A
The fossil sharks of the Tertiary of South Carolina.
Proc. Elliott Soc. Nat. Hist., I, 4.
A brief note only.

—— 1856 B
[Plagiostomes regarded as a distinct class.]
Proc. Bost. Soc. Nat. Hist., VI, 37-38.

—— 1856 C
Development of scales in garpike and sturgeon.
Proc. Bost. Soc. Nat. Hist., VI, 63.

—— 1858 A
Various existing systems of classification of fishes.
Proc. Amer. Acad. Arts, Sci., IV, 8-9.

—— 1859 A
The classification of fishes.
Proc. Amer. Acad. Arts Sci., IV, 108.

—— 1859 B
[Letter written to F. S. Holmes on vertebrate remains found near Charleston, S. C.]
Proc. Acad. Nat. Sci. Phila., XI, 1859, 185-186.

—— 1868 A
Remarks on the classification of siluroids.
Proc. Bost. Soc. Nat. Hist., XI, 354.

—— 1874 A
Three different modes of teething among selachians.
Amer. Naturalist, VIII, 129-135.

——, and C. **Vogt** 1845 A
Anatomie des salmones.
Mem. III, Neuchâtel, 1845, 1-196 pages, pls. A-O.

Ahlborn, F. 1896 B
Über die Bedeutung der Heterocerkie und ähnlicher unsymmetrischer Schwanzformen schwimmender Wirbelthiere für die Ortsbewegung.
Zeitschr. wiss. Zool., LXI, 1-15, pl. i.
Abstracts in Zool. Centralbl., 1895, v, 298-299; Quart. Jour. Micr. Soc. Lond., 1896, 299.

Ahrens, Hans 1912 A
Zur Frage der prälaktischen Zahnanlage.
Anat. Anz., XLII, 506-514.

Ahrens, Hans—Continued 1912 B
Ueber prälakteale Zahnanlagen.
Sitz.-Ber. Ges. Morphol., XXVII, 46-58, 9 text-figs.

—— 1913 A
Entgegnung an Adloff.
Anat. Anz., XLIII, 524-527.

—— 1913 B
Erwiderung an Herrn Adloff.
Anat. Anz., XLV, 107-111.

Aichel, Otto 1917 A
Ist Konkreszenz als Factor bei der phylogenetischen Umwandlung der Zahnform sichergestellt?
Anat. Anz., L, 97-110, 7 figs.

—— 1917 B
Zur Frage der Konkreszenzhypothese.
Anat. Anz., L, 400-406.

—— 1918 A
Ueber Kieferwachstum.
Anat. Anz., LI, 502-510, 3 figs.

—— 1918 B
Kausale Studie zum ontogenetischen und phylogenetischen Geschehen am Kiefer unter besonderer Berücksichtigung von *Elephas* und *Manatus*.
Abh. Akad. Wiss. Berlin, 1918, No. 3, 1-109, pls. i-v, 21 text-figs.

—— 1919 A
Zur Discussion über das Problem der Entstehung der Zahnform.
Anat. Anz., LII, 81-90, 145-152, 193-206, 241-260, 417-439.
Pages 417-439 were published in 1920.

—— 1926 A
Über Zahndurchbruch und Kieferresorption, sowie über das Os sacculi (Aichel).
Anat. Anz., LXI, 42-43.

Airaghi, Carlo 1917 A
Sui molari d'elefante delle alluvioni Lombarde con osservazioni sulla filogenia e scomparsa di alcuni proboscidati.
Mem. Soc. ital. Sci. Nat., VIII, 197-242, pls. xiii-xv.
In the bibliography are listed 46 titles.

Airey, Leslie B. 1919 A
On the presence of haversian systems in membrane bone.
Anat. Rec., XVII, 59-61, 2 figs.

Aladyna, M. 1910 A
Sur le tissu du squelette des téléostéens.
Biol. Zeitschr. Moscou, I, 239-240.

Albrecht, P. 1883 A
Das Os intermedium tarsi der Säugethiere.
Zool. Anz., VI, 419-420, 2 text-figs.

—— 1883 B
Note sur la présence d'épiphyses terminales sur le corps des vertèbres d'un exemplaire de *Manatus americanus.*
Bull. Mus. Roy. Hist. nat. Belgique, II, 35-38, plate ii.

—— 1883 C
Note sur le basioccipital des batraciens anoures.
Bull. Mus. Roy. Hist. nat. Belgique, II, 195-198, 6 figs.

Alden, Wm. C. 1924 A
The physical features of central Massachusetts.
Bull. U. S. Geol. Surv. 760 B., i-v+1-165 pages, pls. vi-xxii, 11 text-figs.

——, and Morris M. **Leighton** 1917 A
The Iowan drift, a review of the evidences of the Iowan stage of glaciation.
Iowa Geol. Surv. XXVI, 49-212, pls. i-xiii, 15 text-figs.

Alessandrini, Antonio 1849 A
De intima squamarum textura piscium, deque scutulis super corio scatentibus crocodili, atque armadili.
Novi Comm. Acad. Sci. Inst. Bonon., IX, 371-392, pls. xxiii-xxvii.

—— 1849 B
Structura integumentorum armadili, *Dasypus novemcinctus* Linn.
Novi Comm. Acad. Sci. Inst. Bonon., IX, 393-410, pls. xxviii, xxix.

Alexander, G. 1904 A
Entwicklung und Bau des inneren Gehörorganes von *Echidna aculeata.*
Semons Zool. Forschungsr., III, 3-118, pls. i-xxiii, 24 text-figs.
The bibliography presents 36 titles.

Alezais, H. 1901 A
Étude anatomique du cobaye (*Cavia cobaye*).
Jour. Anat. Physiol. Paris, XXXVII, 102-126, 270-290, figs. 23-42.
This article describes the muscular system.

—— 1902 A
Quelques adaptations fonctionnelles du rhachis cervical chez les mammifères.
C. R. Assoc. franc. Avanc. Sci., 1901, 30me sess. Ajaccio, sec. partie, 582-588.

Alezais, H.—Continued 1902 B
Le membre pelvien du Kangourou.
C. R. Assoc. Anatomistes, IV, Montpelier, 87-89.

Alix, Edmond 1874 A
Sur la signification des os du bassin des crocodiles.
Jour. Zool. Paris, III, 17-20.

—— 1874 B
Sur l'absence de véritables apophyses articulaires aux vertèbres des poissons osseux.
Jour. Zool. Paris, III, 20-21.

Allen, Glover M. 1901 E
The Louisiana deer.
Amer. Naturalist, XXXV, 449-454.

—— 1906 A
Sowerby's whale on the American coast.
Amer. Naturalist, XL, 357-370, 4 text-figs.
This paper is followed by an extensive biographical list.

—— 1913 A
A new mylodon.
Mem. Mus. Comp. Zool., XL, 319-346, pls. i-iv.
Abstract in Geol. Centralbl., XX, 313-314.

—— 1914 A
The barren-ground caribou.
Proc. N. Eng. Zool. Club, IV, 103-107, 3 figs.

—— 1916 A
The whalebone whales of New England.
Mem. Bost. Soc. Nat. Hist., VIII, 107-322, pls. viii-xvi.
A bibliography occupies pages 317-322.
Reviewed in Nature, XCIX, 293-294.

—— 1919 A
The American collared lemmings (*Dicrostonyx*).
Bull. Mus. Comp. Zool., LXII, 509-540, pl. i, 1 text-fig.
There is a bibliography of 24 titles.

—— 1920 A
Dogs of the American aborigines.
Bull. Mus. Comp. Zool., LXIII, 431-517, pls. i-xii.
The bibliography occupies pages 504-517.

—— 1920 B
Bison remains from New England.
Jour. Mamm., I, 161-164, 3 figs.

—— 1921 A
Fossil cetaceans from the Florida phosphate beds.
Jour. Mamm., II, 144-159, pls. ix-xii.
The bibliography presents titles of 15 papers.

Allen, Glover M.—Continued 1921 B
A review of Winge and Miller on Cetacea.
Jour. Mamm., II, 240-241.

—— 1921 C
A new fossil cetacean.
Bull. Mus. Comp. Zool., LXV, art. 1, 4-14, 1 pl.
Describes *Archæodelphis patrius* Allen.

—— 1923 A
Additional remains of the fossil dugong of Florida.
Jour. Mamm., IV, 231-239, pl. xxvi, 1 text-fig.

—— 1924 A
The type-specimen of *Saurocetus gibbesii* Agassiz.
Jour. Mamm., V, 120-121, 2 figs.

—— 1924 B
The *Delphinus occiduus* of Leidy.
Jour. Mamm., V, 194-195.

—— 1926 A
Fossil animals from South Carolina.
Bull. Mus. Comp. Zool., LXVII, 447-467, pls. i-v.

Allen, Harrison 1864 A
Monograph of the bats of North America.
Smithson. Misc. Coll., VII, art. I, i-xxii+ 1-85 pages, 68 text-figs.

Allen, Henry T. 1887 A
Report of an expedition to the Copper, Tanana, and Koyukuk Rivers in the Territory of Alaska, in the year 1885. 1-172, with plates and maps.
Government Printing Office, Washington, 1887.

Allen, J. A. 1870 A
On the eared seals (Otariadæ), with detailed description of the North Pacific species. Together with an account of the habits of the northern fur seal (*Callorhynchus ursinus*), by Charles Bryant.
Bull. Mus. Comp. Zool., II, 1-108, pls. i-iii.
For review see Gill, T., 1871 C.

—— 1871 A
On the geographical distribution of the birds of eastern North America, with special reference to the number and circumscription of the ornithological faunæ.
Bull. Mus. Comp. Zool., II, 375-450.
Pages 427-450 are a list of authorities on the subject.

Allen, J. A.—Continued 1882 A
Preliminary list of works and papers relating to the mammalian orders Cete and Sirenia.
Bull. U. S. Geol. Geogr. Surv. Terrs., VI, No. 3, 399-562.

—— 1892 A
The geographical distribution of North American mammals.
Bull. Amer. Mus. Nat. Hist., IV, 199-243, pls. v-viii.

—— 1893 B
The geographical origin and distribution of North American birds, considered in relation to faunal areas of North America.
Auk (n.s.), X, 97-150.

—— 1894 A
Cranial variations in *Neotoma micropus* due to growth and individual differentiation.
Bull. Amer. Mus. Nat. Hist., VI, 233-246, pl. iv.

—— 1897 A
The proper generic name of the loons.
Auk, XIV, 312.

—— 1898 A
Revision of the chickarees, or North American red squirrels (subgenus *Tamiasciurus*).
Bull. Amer. Mus. Nat. Hist., X, 249-298.
Presents numerous cranial measurements.

—— 1900 B
The mountain caribou of northern British Columbia.
Bull. Amer. Mus. Nat. Hist., XIII, 1-18, 18 text-figs.

—— 1900 C
Note on the wood bison.
Bull. Amer. Mus. Nat. Hist., XIII, 63-68.

—— 1901 A
The musk-oxen of arctic America and Greenland.
Bull. Amer. Mus. Nat. Hist., XIV, 69-86, pls. xii-xvii, 7 text-figs.

—— 1901 B
A preliminary study of the North American opossums of the genus *Didelphis*.
Bull. Amer. Mus. Nat. Hist., XIV, 149-188, pls. xxii-xxv.

—— 1901 C
The generic names of the Mephitinæ.
Bull. Amer. Mus. Nat. Hist., XIV, 325-334.

Allen, J. A.—Continued 1901 D
Note on the generic names *Didelphis* and *Philander*.
Bull. Amer. Mus. Nat. Hist., XIII, 185-190.

—— 1902 A
Nomenclatorial notes on American mammals.
Bull. Amer. Mus. Nat. Hist., XVI, 159-168.

—— 1902 B
A preliminary study of the South American opossums of the genus *Didelphis*.
Bull. Amer. Mus. Nat. Hist., XVI, 249-279.

—— 1902 C
The hair seals (family Phocidæ) of the North Pacific Ocean and Bering Sea.
Bull. Amer. Mus. Nat. Hist., XVI, 459-499, 10 figures.
This paper presents numerous measurements of skulls of species of *Phoca*.

—— 1902 D
A further note on the generic names of the Mephitinæ.
Proc. Biol. Soc. Wash., XV, 59-66.

—— 1902 E
Mammal names proposed by Oken in his "Lehrbuch der Zoologie."
Bull. Amer. Mus. Nat. Hist., XVI, 373-379.

—— 1903 A
Report on the mammals collected in northeastern Siberia by the Jesup North Pacific expedition, with itinerary and field notes, by N. G. Buxton.
Bull. Amer. Mus. Nat. Hist., XIX, 101-184.

—— 1904 A
A fossil porcupine from Arizona.
Bull. Amer. Mus. Nat. Hist., XX, 383-384.
Abstracts in Geol. Centralbl., VII, 426; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 305.

—— 1904 B
The external ear-bone in rodents.
Bull. Amer. Mus. Nat. Hist., XX, 135-138, 2 figs.

—— 1905 A
The evolution of species through climatic conditions.
Science (n.s.), XXII, 661-668.

—— 1906 A
The "elimination" and "first species" methods of fixing the types of genera.
Science (n.s.), XXIV, 773-779, 858.

Allen, J. A.—Continued 1908 A
The generic names *Mycteria* and *Tantalus* of Linnæus, 1758.
Auk, XXV, 37-38.

—— 1908 B
Notes on *Solenodon paradoxus* Brandt.
Bull. Amer. Mus. Nat. Hist., XXIV, 505-517, pls. XXVIII-XXXIII, 9 text-figs.

—— 1912 A
The probable recent extinction of the musk-ox in Alaska.
Science (n.s.), XXXVI, 720-722.

—— 1912 B
Historical and nomenclatorial notes on North American sheep.
Bull. Amer. Mus. Nat. Hist., XXXI, 1-29.

—— 1913 A
Ontogenetic and other variations in musk-oxen, with a systematic review of the musk-ox group, recent and extinct.
Mem. Amer. Mus. Nat. Hist. (n.s.), I, pt. IV, 101-226, pls. XI-XVIII, 46 text-figs.

—— 1913 B
Review of Gerrit S. Miller: List of North American land mammals in the United States National Museum in 1911.
Science (n.s.), XVIII, 453-454.

—— 1914 A
Individual variation in musk-oxen.
C. R. Congr. internat. Zool., 1913, Monaco, 210-215.

—— 1920 A
Note on Gueldenstaedt's names of certain species of Felidæ.
Jour. Mamm., I, 90-91.

Allis, Edward Phelps 1897 A
The morphology of the petrosal bone and of the sphenoidal region of the skull of *Amia calva*.
Zool. Bull., II, 1-26.

—— 1898 A
On the morphology of certain of the bones of the cheek and snout of *Amia calva*.
Jour. Morphol., XIV, 425-466, pl. XXXIII.
There is appended a bibliography of 43 titles.

—— 1898 B
The homologies of the occipital and first spinal nerves of *Amia* and teleosts.
Zool. Bull., II, 83-97.

Allis, Edward Phelps—Cont'd. 1903 A

On certain features of the lateral canals and cranial bones of *Polyodon folium*.

Zool. Jahrb., Anat., XVII, 659-678, pl. XXVIII, 2 text-figs.

——— 1903 B

The skull and the cranial and first spinal muscles and nerves in *Scomber scomber*.

Jour. Morphol., XVIII, 45-308, pls. iii-xii.

There is a bibliography of 80 titles. Review in Anat. Anz., XXIV, 408-410.

——— 1905 A

The latero-sensory canals and related bones in fishes.

Internat. Monatsschr. Anat. Physiol., XXI, 401-504, pls. viii-xx, 1 text-fig.

——— 1907 A

The cranial anatomy of the mail-cheeked fishes.

Anat. Anz., XXX, 568-573.

——— 1909 A

The cranial anatomy of the mail-cheeked fishes.

Zoologica, Stuttgart, XXII, Heft. 57, i-iii+ 1-219 pages, pls. i-viii.

In the bibliography, pages 209-212, there are cited 107 works on the subject.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 22.

——— 1913 A

The homologies of the ethmoidal region of the selachian skull.

Anat. Anz., XLIV, 322-328.

There is a bibliography of 15 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 39-41.

——— 1914 A

Certain homologies of the palato-quadrate of selachians.

Anat. Anz., XLV, 353-373.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 41.

——— 1915 A

The homologies of the hyomandibula of the gnathostome fishes.

Jour. Morphol., XXVI, 563-624, 1 fig.

There is a bibliography of 56 titles.

——— 1917 A

The prechordal portion of the chondrocranium of *Chimæra colliei*.

Proc. Zool. Soc. Lond., 1917, 105-143, pls. i-iii.

The bibliography records 30 titles.

Allis, Edward Phelps—Cont'd. 1918 A

The myodome and trigemino-facialis chamber of fishes, and the corresponding cavities in higher vertebrates.

Proc. Nat. Acad. Sci., IV, 241-246.

——— 1918 B

On the origin of the hyomandibula of the Teleostomi.

Anat. Record, XV, 257-265, 1 fig.

——— 1919 A

The homologies of the maxillary and vomer bones of *Polypterus*.

Amer. Jour. Anat., XXV, 349-389, pls. i-iii.

There is a bibliography of 34 titles.

——— 1919 B

On the homologies of the squamosal bone of fishes.

Anat. Record, XVII, 72-87.

The bibliography includes 24 titles.

——— 1919 C

On certain features of the otic region of the chondrocranium of *Lepidosteus* and comparison with other fishes and higher vertebrates.

Proc. Zool. Soc. Lond., 1919, 245-266.

The bibliography presents 34 titles.

——— 1919 D

The homologies of the alisphenoids of the Sauropsida.

Jour. Anat. Lond., LIII, 209-222.

The bibliography presents 30 titles.

——— 1919 E

On the homologies of the auditory ossicles and the chorda tympani.

Jour. Anat. Lond., LIII, 362-369.

——— 1920 A

The constrictor muscles of the branchial arches in *Acanthias blainvillii*.

Jour. Anat. Lond., LIV, 222-231, pls. xxiii-xxv.

Six titles are in the bibliography.

——— 1922 A

The myodome and the trigemino-facialis chamber in the Cœlacanthidæ, Rhizodontidæ, and Palæoniscidæ.

Jour. Anat. Lond., LVI, 149-154.

The bibliography cites 15 papers.

——— 1922 B

The cranial anatomy of *Polypterus*, with special reference to *Polypterus bichir*.

Jour. Anat. Lond., LVI, 189-294, pls. iii-xxiv.

In the bibliography are recorded 36 titles.

Allis, Edward Phelps—Cont'd. 1922 C

On certain features of the latero-sensory canals of the Plagiostomi.

Jour. Comp. Neur., xxxv, 1-14.

The literature cited includes 13 titles.

—— 1923 A

The postorbital articulation of the palatoquadrate with the neurocranium in the cœlacanthid fishes.

Proc. Zool. Soc. Lond., 1923, 41-58.

The bibliography presents titles of 33 papers.

—— 1923 B

The cranial anatomy of *Chlamydoselachus anguineus.*

Acta Zool., iv, 123-221, pls. i-xxiii.

In this bibliography are 72 titles.

—— 1925 A

On the origin of the V-shaped branchial arch in the Teleostomi.

Proc. Zool. Soc. Lond., 1925, pt. 1, 75-77.

8 titles are found in the bibliography.

—— 1926 A

On certain features of the orbito-ethmoidal region in the Cyclostomata, Plagiostomi and Teleostomi.

Jour. Anat. Lond., lx, 164-172.

The bibliography includes 24 titles.

—— 1926 B

On the homologies of the prechordal portion of the skull of the Holocephala.

Jour. Anat. Lond., lx, 325-340.

In the bibliography are 11 titles.

Allis, T. H. 1835 A

On the mode of attachment of the os furcatum to the sternum in various grallatorial and natatorial birds.

Proc. Zool. Soc. Lond., 1835, 155.

Alth, A. 1884 A

On the shield in fish of the genera *Pteraspis* and *Scaphaspis* from the palæozoic strata of Galician Podolia.

Kraków Akad. (mat-przyrod.) Rospr. i Spraw., xi, 160-187+lxiii-lxvi, pl. vi.

This paper, probably issued as a separate in 1833, is printed in Polish.

Dean, B, 1917 A, p. 24, has quoted it from the memoirs (Pamietnik) of the Academy of Krakow, 1886.

Abstract in Archives slaves de Biologie, i, 1886, Analyses et C. R.

Altmann, Franz 1925 A

Untersuchungen über die Torsio femoris und damit im Zusammenhang stehende Fragen.

Zeitschr. Anat. Entwicklungsges., Abt. I, lxxv, 82-126, 27 figs.

The bibliography occupies pages 124-126.

Amalitsky, V. P. 1921 A

Dvinosauridæ.

North Dvina Excavations of Prof. V. P. Amalitsky, i, 1-16, pls. i-iv.

—— 1921 B

Seymouridæ.

North Dvina Excavations of Prof. V. P. Amalitsky, ii, 1-14, pls. i, ii. Petrograd Akad. Nauk.

—— 1922 A

Diagnoses of the new forms of vertebrates and plants from the Upper Permian on North Dvina.

Bull. Acad. Sci. Russie, 1922, 329-340, 14 figs. Preface by A. Karpinsky. Reprint, pages 1-12.

—— 1924 A

On the Dvinosauridæ, a family of labyrinthodonts from the Permian of Russia.

Ann. Mag. Nat. Hist. (9), xiii, 50-64, pl. i.

The bibliography presents 17 titles.

—— 1924 B

On new *Cotylosauria* of the family Seymouridæ from the Permian of North Russia.

Ann. Mag. Nat. Hist. (9), xiii, 64-77.

The bibliography presents 8 titles. The paper is translated from the Russian. 4to., Petrograd, 1921, 1-14, 3 pls.

Abstract in Neues Jahrb. Min. Geol. Pal., 1924, i, 397-399.

Ameghino, Carlos 1916 A

La formula dentaria del genero *Arctotherium.*

Physis. ii, 285-286.

——, and L **Kraglievich** 1921 A

Descripción del *Megatherium gallardoi* C. Ameg.

An. Mus. Nac. Buenos Aires, xxxi, 135-156, 5 pls.

Reprints with pagination 1-24.

Ameghino, F. 1883 B

Sobre una nueva coleccion mamiferos fósiles recogidos por el profesor Scalabrini en las barrancas del Parana.

Bol. Acad. Cien. Cordóba, v, 55-104.

—— 1885 A

Nuevos restos de mamíferos fósiles oligocenos recogidos por el profesor Pedro Scalabrini y pertenecientes al Museo Provincial de la Cuidad del Parana.

Bol. Acad. Cien. Cordóba, viii, 5-205.

Ameghino, F.—Continued 1886 B

Oracanthus und Cœlodon, verschiedene Gattungen einer und derselben Familie.

Sitz-Ber. Akad. Wiss. Berlin, 1886, I, 463-466.

—— 1889 A

Contribucion al conocimiento de los mamíferos fósiles, etc.

Act. Acad. Cien. Cordóba, VI, i-xxxiii+ 1-1027 pages, atlas of pls. i-xcviii.

—— 1889 B

Sur les mammifères fossiles de la République Argentine.

C. R. Congr. internat. Zool. Paris, 1889, 280.

—— 1891 E

Mamíferos y aves fósiles argentinas. Especies nuevas, adiciones y correcciones.

Revista Argent. Hist. Nat., I, 240-259, 1 figure.

—— 1893 A

Enumération synoptique des espèces de mammifères fossiles des formations éocènes.

Bol. Acad. Cien. Cordóba, XIII, 259-452, 66 figs.

There is appended an extensive bibliography.

—— 1893 B

New discoveries of fossil Mammalia of southern Patagonia.

Amer. Naturalist, XXVII, 439-449.

Translated from Rev. Scient. Paris, LI, 13-17.

—— 1893 C

Les premiers mammifères. Rélations entre les mammifères diprotodontes éocènes de l'Amerique du Nord et ceux de la République Argentine.

Rev. gen. Sci. Paris, IV, 77-81, 5 figs.

—— 1893 D

Les mammifères fossiles de la Patagonie australe.

Rev. Scient. Paris, LI, 13-17.

—— 1893 E

Nouvelles découvertes paléontologiques dans la Patagonie australe.

Rev. Scient. Paris, LI, 731.

—— 1897 B

South America as the source of the Tertiary Mammalia.

Nat. Sci., XI, Oct., 256-264.

Ameghino, F.—Continued 1898 C

L'âge des couches fossilifères de Patagonie; nouvelles découvertes de mammifères fossiles.

Rev. Scient. Paris (4), X, 72-74.

—— 1900 A

Mamíferos del cretáceo inferior de Patagonia (Formación de las areniscas abigarradas).

Commun. Mus. Nac. Buenos Aires, I, 197-206, 5 text-figs.

Abstract in Geol. Centralbl., I, 122.

—— 1900 B

Grypotherium, nom de genre à effacer.

Commun. Mus. Nac. Buenos Aires, I, 257-260.

Abstract in Geol. Centralbl., II, 187.

—— 1901 A

Notices préliminaires sur des ongulés nouveaux des terrains crétacés de Patagonie.

Bol. Acad. Cien. Córdoba, XVI, 349-426.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 167-172; Rev. crit. Paléozool., VI, 53-59.

—— 1902 A

Linea filogenética de los proboscideos.

An. Mus. Nac. Buenos Aires (3), I, 19-42, with a phylogenetic table and 38 text-figs.

Abstract in Rev. crit. Paléozool., 1-4; Jabresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 117-118.

—— 1902 B

Cuadro sinóptico de las formaciones sedimentarias, terciarias y cretáceas de la Argentina en relación con el desarrollo y descendencia de los mamíferos.

An. Mus. Nac. Buenos Aires (3), I, 1-12.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 110-113.

—— 1902 C

Notas sobre algunos mamíferos fósiles nuevos ó poco conocidos del valle de Tarija.

An. Mus. Nac. Buenos Aires (3), I, 225-261, pls. i-vii, 1 text-fig.

For abstract see Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 289-290.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 110-113.

Ameghino, F.—Continued 1902 D

Sur le type primitif des molaires plexodontes des mammifères.

An. Mus. Nac. Buenos Aires (3), I, 419-439, pls. i-viii, 16 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 110-113.

—— 1903 A

Los diprotodontes del orden de los plagiaulacoideos y el origen de los roedores y de los polimastodontes.

An. Mus. Nac. Buenos Aires (3), II, 81-192, 121 text-figs.

The paper concludes with a bibliography of 55 titles.

Reviews in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 157-166; Rev. crit. Paléozool., VII, 184-187.

Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 182-183.

—— 1904 A

Recherches de morphologie phylogénétique sur les molaires supérieures des ongulés.

An. Mus. Nac. Buenos Aires (3), III, 1-541, 631 text-figs.

Abstracts in Rev. crit. Paléozool., VIII, 199-206; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 454-468.

—— 1904 B

Paleontología Argentina.

Pubs. Univ. de La Plata (Repúblic Argentina) No. 2, 1-79, 72 text-figs.

For an extensive notice of this paper by M. Schlosser see Neues Jahrb. Min. Geol. Pal., 1906, II, Ref., 124-131.

—— 1904 C

Nuevas especies de mamíferos, cretáceous, y tercíarios de la Republica Argentina.

An. Soc. Cien. Argent., VI-VIII, 1-142.

—— 1905 A

La faceta articular inferior unica del astragalo de algunos mamíferos, no es un carácter primitivo.

An. Mus. Nac. Buenos Aires (3), V, 1-64, 69 text-figs.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 475-477; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 168-169.

—— 1905 B

Presencia de la perforación astragaliana en el tejón (*Meles taxus* Bodd.).

An. Mus. Nac. Buenos Aires (3), V, 193-201, 3 text-figs.

Ameghino, F.—Continued 1905 C

La perforación astragaliana en los mamíferos no es un carácter originariamente primitivo.

An. Mus. Nac. Buenos Aires (3), IV, 349-460, 98 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 169.

—— 1906 A

Les formatíons sedimentaires du crétacé supérieur et du tertiaire de Patagonie.

An. Mus. Nac. Buenos Aires (3), VIII, 1-568, pls. i-iii, 358 text-figs.

Pages 3-18 are an extensive bibliography.

Abstract in Rev. crit. Paléozool., XI, 65-71.

Reviewed in Nature, LXXVII, 68.

—— 1906 B

La perforación astragaliana en Priodontes *Canis* (*Chrysocyon*) y *Typotherium*.

An. Mus. Nac. Buenos Aires (3), VI, 1-19, 15 text-figs.

Abstracts in Rev. crit. Paléozool., X, 16.

—— 1906 C

La perforación astragalienne sur quelques mammifères du miocène moyen de France.

An. Mus. Nac. Buenos Aires (3), VI, 41-58, 12 text-figs.

Abstract in Rev. crit. Paléozool., X, 16.

—— 1906 D

La perforación astragaliana en el *Orycteropus* y el origen de los Orycteropidæ.

An. Mus. Nac. Buenos Aires (3), VI, 59-95, 32 text-figs.

Abstract in Rev. crit. Paléozool., X, 16.

—— 1906 E

Les édentés fossiles de France et d'Allemagne.

An. Mus. Nac. Buenos Aires (3), VI, 175-250, 61 text-figs.

Abstract in Rev. crit. Paléozool., X, 83-86.

—— 1907 A

Notas sobre una pequeña coleccion de huesos de mamiferos procedentes de las grutas calcáreas de Iporanga en el Estado de São Paulo, Brazil.

Revista Mus. Paulista, VII, 59-124, 22 text-figs.

—— 1908 A

Sobre dos esqueletos de mamíferos fósiles armados recientemente en el Museo Nacional.

An. Mus. Nac. Buenos Aires (3), IX, 35-43, 4 text-figs.

Ameghino, F.—Continued 1908 B

Notes sur les poissons du Patagonien.

An. Mus. Nac. Buenos Aires (3), IX, 477-497, 3 text-figs.

—— 1909 A

El arco escapular de los edentados y monotremos y el origen reptiloide de estos dos grupos de mamíferos.

An. Mus. Nac. Buenos Aires (3), X, 1-91, 60 text-figs.

Note on by Lydekker, Nature, LXXVIII, 348.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 159.

—— 1909 B

Encore quelques mots sur les tatous fossiles de France et d'Allemagne.

An. Mus. Nac. Buenos Aires (3), X (XVII), 93-110, 12 figs.

—— 1911 A

L'avant-première dentition dans le tapir.

An. Mus. Nac. Buenos Aires (3), XIII, 1-30, pls. i-iv.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 351-352; Rev. crit. Paléozool., XIV, 173.

—— 1912 A

L'âge des formations sédimentaires tertiaires de l'Argentine en relation avec l'antiquité de l'homme.

An. Mus. Nac. Buenos Aires (3), XV, 45-75.

—— 1912 B

L'âge des formations sédimentaires tertiaires de l'Argentine en relation avec l'antiquité de l'homme. Note supplémentaire.

An. Mus. Nac. Buenos Aires (3), XV, 169-179.

Ami, H. M. 1897 A

Contribution to the palæontology of the Post-pliocene deposits of the Ottawa Valley.

Ottawa Naturalist, XI, 20-26.

—— 1898 A

The mastodon in western Ontario.

Science (n.s.), VII, 80.

Title wrongly quoted in Hay, O. P., 1902 A, page 19.

Abstract in Ottawa Naturalist, XI, 223.

—— 1899 A

[On certain fossils.]

Summ. Rep. Geol. Surv. Canada, 1898 (1899), 174-182.

Ami, H. M.—Continued 1901 A

On a new ostracoderm (*Euphanerops longævus*) from the Upper Devonian of Scaumenac Bay, Province of Quebec, Canada.

Ottawa Naturalist, XV, 174.

An abstract of Woodward, A. S., 1900 B.

—— 1901 B

Knoydart formation of Nova Scotia.

Bull. Geol. Soc. Amer., XII, 301-312, 1 text-fig.

—— 1901 C

List of fossils to accompany report by Dr. R. W. Ells on the city of Ottawa map.

Rep. Geol. Surv. Canada for 1899, XII, G, 51-77.

The vertebrate fossils belong to the Pleistocene and are recorded on pages 53 and 54.

—— 1901 D

Palæontological note.

Canad. Rec. Sci., VIII, 331-332.

A review of Cope, E. D., 1894 G, on *Cyphornis*.

—— 1902 A

Description of tracks from the fine-grained siliceous mudstones of the Knoydart formation (Eo-Devonian) of Antigonish County, Nova Scotia.

Trans. Nova Scot. Inst. Sci., X, 330-332, pl. ii. Abstract in Rev. crit. Paléozool., VIII, 24.

Ammon, Ludwig von 1911 A

Schildkröten aus dem Regensburger Braunkohlenton.

Jahresber. Naturwiss. Ver. Regensburg, XII, Separ. Beil.-Bd., 1-35, pls. and text-figs.

A. O. U. 1910 A

Check-list of North American birds.

Prepared by a committee of the American Ornithologists' Union. Third edition (revised), 1-430 pages.

Anderson, C. 1925 A

The Australian fauna.

Roy. Soc. N. S. Wales, LIX, 15-34.

The bibliography contains 34 titles.

Anderson, Frank M. 1908 A

A further stratigraphic study in the Mount Diablo range of California.

Proc. Calif. Acad. Sci. (4), III, 1-40.

—— 1911 A

The Neocene deposits of Kern River, California, and the Temblor basin.

Proc. Calif. Acad. Sci. (4), III, 73-148, pls. ii-xiii.

Anderson, John 1879 A

Anatomical and zoological researches: Comprising an account of the zoological results of the two expeditions to western Yunnan in 1868 and 1875. London, 1878 (1879).

Vol. I, 357-564, pls. xxv-xliv.

Anderson, Netta C. 1905 A

A preliminary list of fossil mastodon and mammoth remains in Illinois and Iowa.

Augustana Lib. Pub., No. 5, 1-40, 2 maps.
Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 305.

Anderson, Richard John 1898 A

Some notes on the manus of the dugong.

Jour. Anat. Physiol. Lond., XXXII, (n.s. XII), 765-767.

—— 1900 A

The dentition of the seal.

Rep. Brit. Assoc. Adv. Sci., 70th Meet., Bradford, 1900, 790-792.

—— 1901 A

The relationships of the premaxilla in bears.

Rep. Brit. Assoc. Adv. Sci., 71st Meet., Glasgow, 681-682.

—— 1902 A

A note on the premaxilla in some mammals.

Verh. internat. Zool.-Kongr., Berlin, in 1901, V, 1118-1127, 40 text-figs.

—— 1902 B

A note on the occipito-atloid articulation in some arctoids.

Jour. Anat., Physiol. Lond., XXXVI, (n.s., XVI), 368-371, 15 figs.

—— 1902 C

Some questions with reference to occipital condyles.

Brit. Med. Jour., 1902, II, 785.

—— 1903 A

The connection of the anterior inferior angle of the parietal bone in Primates.

Rep. Brit. Assoc. Adv. Sci., 72d Meet., Belfast, 1902, 651-652.

—— 1904 A

The premaxilla in Primates.

C. R. Congr. internat. Med., XIV, Madrid, 1903, Anat., 147-154, 29 text-figs.

—— 1905 A

Some considerations respecting the parietal bone.

Internat. Monatsschr. Anat. Physiol., XXI, 319-343, 83 text-figs.

Anderson, Richard John—Cont'd.

1908 A

The thickness of the skull in Mammalia.

Rep. Brit. Assoc. Adv. Sci., 77th Meet., Leicester, 1907, 546-547.

—— 1909 A

The maxilla and palatine in the Mammalia.

Rep. Brit. Assoc. Adv. Sci., 78th Meet., Dublin, 1908, 744-745.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 29.

—— 1909 B

The epiphyses of long bones (chiefly in sauropsids).

Rep. Brit. Assoc. Adv. Sci., 78th Meet., Dublin, 1908, 745-746.

—— 1910 A

The occipital bone in Primates.

C. R. internat.-Congr. Méd., Budapest, 1909, XVI, sec. 1, 112-121, 7 figs.
See also Internat. Monatsschr. Anat. Physiol., XXVII, 1910, 73-83.

—— 1911 A

The temporal bone in Primates.

Rep. Brit. Assoc. Adv. Sci., 80th Meet., Sheffield, 1910, 639.

—— 1912 A

Some aspects of variation.

Verh. internat. Zool.-Kongr., Gratz, 1910, VIII, 914-921.

—— 1912 B

Note on the manus of a young Indian elephant.

Rep. Brit. Assoc. Adv. Sci., 81st Meet., Portsmouth, 1911, 428.

—— 1912 C

Some points in manus and pes of Primates.

Rep. Brit. Assoc. Adv. Sci., 81st Meet., Portsmouth, 1911, 429-430.

—— 1912 D

The mandible in Mammalia.

Proc. internat. zool. Congr., Boston, 1907, VII, 250-253.
Reprints may have been issued earlier.

—— 1912 E

The notes on the temporal bone in Mammalia (chiefly in Primates).

Verh. internat. Zool.-Kongr., Gratz, 1910, VIII, 907-914.

—— 1913 A

The skeletal elements of the extremities in Primates.

Internat. Congr. Med., London, Anat., Embr., XVII, pt. 2, 123-129.

Anderson, Richard John—Cont'd 1914 A

Some notes on the skeletal elements of the mammalian limb.

Rep. Brit. Assoc. Adv. Sci., 83d Meet., Birmingham, 1913, 533-534.

Andreæ, A. 1900 A

Review of O. Jaekel: Über *Hybodus* (Jaekel, O., 1898 B).

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 470-472.

—— 1901 A

Abstracts of papers by Alban Stewart (Stewart, A., 1898 B; 1898 C; 1898 D).

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 308-309.

—— 1901 B

Review of R. H. Traquair: Report on fossil fishes collected by the Geological Survey of Scotland in the Silurian rocks of the south of Scotland. (Traquair, R. H., 1899 A.)

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 505-508, 4 figs.

—— 1901 C

Abstract of F. A. Lucas: Characters and relations of *Gallinuloides*, a fossil gallinaceous bird from the Green River shales of Wyoming. (Lucas, F. A., 1900 B.)

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 474.

—— 1903 A

Review of H. F. Osborn: Reconsideration of the evidences for a common dinosaur-avian stem in the Permian. (Osborn, H. F., 1900 G.)

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 149-152.

—— 1903 B

Abstract of O. P. Hay: Descriptions of some vertebrates of the Carboniferous age. (Hay, O. P., 1900 A.)

Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 442.

—— 1904 A

Review of F. B. Loomis: Die Anatomie und die Verwandtschaft der Ganoid- und Knochenfische aus der Kreideformation von Kansas, U. S. A. (Loomis, F. B., 1900 A.)

Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 308-310.

Andreæ, A.—Continued 1904 B

Abstract of F. A. Lucas: A new fossil cyprinoid, *Leuciscus turneri*, from the Miocene of Nevada. (Lucas, F. A., 1900 F.)

Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 461.

Andres, Jos. 1924 A

Untersuchungen über das Auftreten und die weitere Entwicklung der embryonalen Hirnschädelknochen des Schweines.

Morphol. Jahrb., LIII, 259-303, 19 figs.

There is a bibliography of 25 titles.

Andrews, C. W. 1896 B

Note on the pelvis of *Cryptoclidus oxoniensis* (Phillips).

Geol. Mag. (4), III, 145-148, fig.

—— 1901 A

Preliminary note on some recently discovered extinct vertebrates from Egypt.

Geol. Mag. (4), VIII, 400-409, 436-444, 8 figs.

—— 1902 A

Preliminary note on some recently discovered vertebrates from Egypt (part 3).

Geol. Mag. (4), IX, 291-295.

—— 1903 A

A preliminary notice of a land tortoise from the Upper Eocene of the Fayum, Egypt. With notes by H. J. Beadnell.

Survey Dep't, Public Works Ministry, 1-10 pages. Cairo; National Printing Dep't.

—— 1903 B

On the evolution of the Proboscidea.

Philos. Trans. Roy. Soc. Lond., CXCVI, B, 99-118, text-figs. 1-17.

Abstracts in Ann. Mag. Nat. Hist. (7), XI, 527-528; Geol. Mag. (4), X, 225; Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 318-320; Geol. Centralbl., V, 327; Proc. Roy. Soc. London, LXXI, 443-444; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 185-186.

—— 1903 C

Some suggestions on extinction.

Geol. Mag. (4), X, 1-2.

—— 1903 D

Diagram of the skull of *Mastodon angustidens*.

Rep. Brit. Assoc. Adv. Sci., 72d Meet., Belfast, 1902, 654.

Andrews, C. W.—Continued 1903 E

On the evolution of the Proboscidea.

Geol. Mag. (4), x, 225-226.

Originally published in Proc. Roy. Soc. Lond., LXXI, 443-444.

—— 1904 A

Further notes on the mammals of the Eocene of Egypt.

Geol. Mag. (5), I, 109-115, 2 text-figs; 157-162, pl. vi; 211-215.

—— 1906 A

A descriptive catalogue of the Tertiary Vertebrata of the Fayum, Egypt.

Pages i-xxvii+1-324, with frontispiece, pls. i-xxvi, and 98 text-figs., 4to., London.

Résumés in Neues Jahrb. Min. Geol. Pal., 1907, II, 307-317; Rev. crit. Paléozool., XI, 5-7; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 165-166; Nature, LXXIV, 175-178; Sci. Progress, I, 498; Geol. Mag. (5), III, 266-269.

—— 1907 A

Notes on the cervical vertebra of a zeuglodon from the Barton Clay of Barton Cliff (Hampshire).

Quart. Jour. Geol. Soc., LXIII, 124-127, 1 text-fig.

—— 1907 B

Notes on the osteology of *Ophthalmosaurus icenicus* Seeley, an ichthyosaurian reptile from the Oxford Clay of Peterborough.

Geol. Mag. (5), IV, 202-208, 5 text-figs.

For correction of some errors in this paper see Geol. Mag., V, 1908, 96.

Abstracts in Geol. Centralbl., X, 44; Sci. Progress, II, 516; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 167.

—— 1907 C

The recently discovered Tertiary Vertebrata of Egypt.

Rep. Smithson. Instn., 1906 (1907), 295-307.

—— 1908 A

On the skull, mandible, and milk dentition of *Palæomastodon*, with some remarks on the tooth changes in the Proboscidea.

Philos. Trans. Roy. Soc. Lond., CXCIX, 393-407, pls. xxi-xxxii, text-figs. 1, 2.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 134-136; Rev. crit. Paléozool., XIII, 69, 70; Geol. Centralbl., XII, 149; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 35; Sci. Progress, III, 456.

—— 1908 B

Note on a model of the skull and mandible of *Prozeuglodon atrox* Andrews.

Geol. Mag. (5), V, 209-212, pl. ix.

Andrews, C. W.—Continued 1908 C

Model of the skull and mandible of *Prozeuglodon atrox* And.

Proc. Zool. Soc. Lond., 1908, 203.

A very brief note.

—— 1908 D

A guide to the elephants (recent and fossil) exhibited in the department of geology and palæontology in the British Museum (Natural History).

8vo., pages 1-46, 31 text-figs.

The author discusses the ancestral history of the Proboscidea.

—— 1909 A

Note on the mandible of a new species of *Tetrabelodon* from the Loup Fork beds of Kansas.

Geol. Mag. (5), VI, 347-349, figs. A-C.

Abstracts in Geol. Centralbl., XIII, 396; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 138; Rev. crit. Paléozool., XIV, 7; Sci. Progress, IV, 662.

—— 1909 B

On some new Plesiosauria from the Oxford Clay of Peterborough.

Ann. Mag. Nat. Hist. (8), IV, 418-429, 7 figs.

Abstract in Sci. Progress, IV, 669.

—— 1909 C

The systematic position of *Mæritherium*.

Nature, LXXXI, 305.

—— 1910 A

A descriptive catalogue of the marine reptiles of the Oxford Clay. Based on the Leeds collection in the British Museum (Natural History), London, Part I.

Pages i-xxiv+1-205, with frontispiece, pls. i-x and 94 text-figs., 4to, London.

Abstracts in Science (2), XXXV, 84; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 314-316; Sci. Progress, V, 684-685; Rev. crit. Paléozool., XV, 29-31; Geol. Centralbl., XVIII, 327-328; Geol. Mag. (5), VII, 564-567.

—— 1911 A

On the structure of the roof of the skull and of the mandible of *Peloneustes*, with some remarks on the plesiosaurian mandible generally.

Geol. Mag. (5), VIII, 160-164, 2 text-figs.

—— 1911 B

Description of a new plesiosaur (*Plesiosaurus capensis*, sp. nov.) from the Uitenhage beds of Cape Colony.

Ann. S. African Mus., VII, 309-322, pl. xviii, 4 text-figs.

Andrews, C. W.—Continued 1911 C

Origin of mammals.

Nature, LXXXVIII, 294.

—— 1912 A

On the importance of Africa in vertebrate palæontology.

Geol. Mag. (5), IX, 454-455.

—— 1913 A

A descriptive catalogue of the marine reptiles of the Oxford Clay. Based on the Leeds collection in the British Museum (Natural History), London. Part II.

Pages i-xxiv+1-206, with frontispiece, pls. i-xiii, 73 text-figs., 4to., London.

Abstracts in Geol. Mag. (5), X, 219-223; Science (2), XXXV, 84; Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 514-518. Rev. crit. Paléozool., XVII, 134-138.

—— 1913 B

On the skull and part of the skeleton of a crocodile from the Middle Purbeck of Swanage.

Ann. Mag. Nat. Hist. (8), XI, 485-494, pl. viii, 2 text-figs.

—— 1915 A

Note on a mounted skeleton of *Ophthalmosaurus icenicus* Seeley.

Geol. Mag. (6), II, 145-146, pl. v.

Abstract in Geol. Zentralbl., XXVI, 315.

—— 1916 A

Note on a mounted skeleton of a "gazelle-camel," *Stenomylus hitchcocki* Loomis.

Geol. Mag. (6), III, 1-2, pl. i.

Abstracts in Rev. crit. Paléozool., XXI, 133; Geol. Zentralbl., XXVI, 379.

—— 1916 B

Note on the sternum of a large carinate bird from the (?)Eocene of southern Nigeria.

Proc. Zool. Soc. Lond., 1916, 519-524, figs. 1-4.

—— 1916 C

Review of W. D. Matthew's "Mammoths and mastodons."

Ann. Mag. Nat. Hist. (8), III, 128.

—— 1916 D

Discussion on the "Biologia Centrali-Americana."

Proc. Zool. Soc. Lond., 1916, 548-549.

—— 1917 A

A gigantic Eocene bird.

Geol. Mag. (6), IV, 469-470. A review of Matthew and Granger on *Diatryma*.

Abstract in Geol. Zentralbl., XXIII, 445.

Andrews, C. W.—Continued 1919 A

A description of a new species of zeuglodont and of leathery turtle from the Eocene of Southern Nigeria.

Proc. Zool. Soc. Lond., 1919, 309-319, pls. i, ii, 3 text-figs.

—— 1921 A

On a new chelonian from the Kimmeridge Clay of Swindon.

Ann. Mag. Nat. Hist. (9), VII, 145-153, 3 figs.

—— 1921 B

Note on a skull of *Dinotherium giganteum* in the British Museum.

Proc. Zool. Soc. Lond., 1921, 525-534, 4 figs.

—— 1921 C

On some remains of a theropodous dinosaur from the Lower Lias of Barrow-on-Soar.

Ann. Mag. Nat. Hist. (9), VIII, 570-576, 2 figs.

—— 1922 A

Description of a new plesiosaur from the Weald Clay of Berwick (Sussex).

Quart. Jour. Geol. Soc., LXXVIII, 285-298, pls. xiv, xv, 2 figs.

—— 1922 B

A guide to the elephants (recent and fossil) exhibited in the department of geology and palæontology in the British Museum (Natural History).

Pages 1-48, 30 figs.

—— 1923 A

Note on the skulls from which the endocranial casts described by Dr. Dart were taken.

Proc. Zool. Soc. Lond., 1923, 648-652, text-figs. 22-24.

—— 1923 B

Exhibition of a phalageal bone of one of the *Ancylopoda* from Uganda.

Proc. Zool. Soc. Lond., 1923, 1095.

—— 1923 C

Note on the skull and mandible of a Siberian mammoth exhibited in the British Museum.

Ann. Mag. Nat. Hist. (9), XII, 322-325, 544, pl. x.

—— 1924 A

On some similarities in the evolution of the dentition in the Sirenia and the Proboscidea.

Ann. Mag. Nat. Hist. (9), XIII, 304-309.

Andrews, C. W.—Continued 1924 B
Note on an ichthyosaurian paddle showing traces of soft tissues.
Proc. Zool. Soc. Lond., 1924, 533-537, pl. 1, 2 text-figs.

Andrews, E. B. 1874 A
Report on the geology of Washington County [Ohio].
Geol. Surv. Ohio, II, pt. i, Geol., 453-508.

Andrews, Roy Chapman 1914 A
The California gray whale (*Rhachianectes glaucus* Cope): Its history, habits, osteology and systematic relationship.
Ann. N. Y. Acad. Sci., XXII, 289-290.

—— 1916 A
The Sei whale (*Balænoptera borealis* Lesson). History, habits, external anatomy, osteology, and relationships.
Mem. Amer. Mus. Nat. Hist. (n.s.), I, pt. vi, 291-388, pls. xxix-xlii, 38 text-figs.

—— 1921 A
A remarkable case of external hind limbs in a humpback whale.
Amer. Mus. Novitates, No. 9, 1-6, 4 figs.

Anonymous 1821 A
Gehörknochen im Fische.
Isis von Oken, 1821, 272-277, pl. iv. (Subscribed "Anonymus.")

—— 1854 A
Discovery of mastodon at Poughkeepsie, N. Y.
Amer. Jour. Sci. (2), XVIII, 447.

—— 1868 A
A brief notice of the restored skeleton of the great herbivorous lizard *Hadrosaurus* in the Museum of the Academy of Natural Sciences [of Philadelphia].
A pamphlet of 12 pages, probably intended for visitors.

—— 1871 A
Donation of skull of *Taxidea* from asphalt beds near Los Angeles.
Proc. Calif. Acad. Sci. (1), IV, 139.

—— 1878 A
American Jurassic dinosaurs.
Nature, XIX, 76.
Abstract of Marsh, O. C., 1878 F.

—— 1879 A
The home of the mastodon.
Kansas City Rev. Sci. Indust., III, 263-266.
Quoted from the "New York World."

Anonymous—Continued 1880 A
Sternum in dinosaurs.
Nature, XXII, 113.
Abstract of Marsh, O. C., 1880 D.

—— 1880 B
The toothed birds of Kansas.
Nature, XXII, 557-558.
Review of Marsh, O. C., 1880 G.

—— 1897 A
The origin of the edentate mammals. The South American edentate mammals. The Old World edentate mammals.
Nat. Sci., XI, 150-153.

—— 1897 B
The classification of rodents.
Nat. Sci., X, 367-368.
A criticism of Thomas, O., 1896 A.

—— 1898 A
Review of A. S. Woodward's "Outlines of Vertebrate Palæontology" (Woodward, A. S., 1898 B).
Geol. Mag. (4), V, 367-373.

—— 1898 B
Review of H. F. Osborn's "The Extinct Rhinoceroses."
Geol. Mag. (4), V, 374-375.

—— 1898 C
Notes and comments.
Nat. Sci., XII, 74 (The deep-sea shark *Chlamydoselache*); 85 (A Devonian fish-spine).

—— 1903 A
A Siberian mammoth.
Scient. Amer., LXXXIX, 390, 1 text-fig.
Quoted from The Sphere.

—— 1904 A
Mastodon at Belvidere, N. Y.
Amer. Geologist, XXXIII, 60.

—— 1904 B
Model of the four-toed horse.
Amer. Mus. Jour., IV, 40-41.

—— 1905 A
The brontosaur. How a giant prehistoric animal was discovered, transported and restored.
Scient. Amer., XCII, 42-43, 2 text-figs.
A popular account of methods employed.

—— 1905 B
Notice of papers on American fossil reptiles.
Nature, LXXIII, 205.

—— 1905 C
The new *Diplodocus* skeleton.
Nature, LXXII, 82-83, 1 text-fig.

Anonymous—Continued 1905 D

The presentation of a reproduction of *Diplodocus carnegei* to the trustees of the British Museum.

Ann. Carnegie Mus., III, 443-452, pls. xvii, xviii.

—— 1905 E

Diplodocus carnegiei.

Geol. Mag. (5), II, 576, pl. xxv.

—— 1905 F

Prof. Lankester's "Extinct Animals."

Nature, LXXIII, 6-7, 2 figs.

—— 1906 A

The Warren mastodons.

Science (n.s.), XXIII, 199.

—— 1906 B

[Fossil vertebrates received by American Museum of Natural History.]

Science (n.s.), XXIII, 228.

—— 1906 C

[Fossil bison from Yukon in Carnegie Museum.]

Science (n.s.), XXIV, 711.

—— 1906 D

[The paleontological expedition of the Carnegie Museum.]

Science (n.s.), XXIV, 711-712.

—— 1906 E

New dinosaurs.

Knowl. Scient. News (n.s.), III, 411.

—— 1907 A

The skeleton of the Columbian mammoth.

Amer. Mus. Jour., VII, 5-6.

—— 1907 B

The *Naosaurus*, or ship-lizard.

Amer. Mus. Jour., VII, 36-41, 2 figs.

—— 1907 C

The Warren mastodon.

Amer. Mus. Jour., VII, 91-92, 1 plate.

—— 1908 A

[*Orohippus osbornianus* Cope in the American Museum of Natural History.]

Science (n.s.), XXVIII, 723.

—— 1908 B

Exhibit illustrating the evolution of the horse.

Amer. Mus. Jour., VII, 117-122, 5 figs.

—— 1908 C

Mammoth hunting in Alaska.

Nature, LXXVIII, 346, 1 fig.

A notice and figure of skull of *Elephas primigenius* figured by Gilmore (Gilmore, C. W., 1908 A, p. 27, fig. 7).

Anonymous—Continued 1908 D

Sind alle im inneren von Ichthyosauren liegenden Jungen ausnahmslos Embryonen?

Aus der Natur, IV, 349-351.

Signed Dr. F. T.

—— 1909 A

The attitude of *Diplodocus.*

Scient. Amer., CI, 334, 2 text-figs.

—— 1910 A

Progress of paleontological research by the Carnegie Institute [Pittsburgh.]

Science (n.s.), XXXI, 197-198.

—— 1910 B

The *Tyrannosaurus.*

Amer. Mus. Jour., X, 3-8, 6 illustrations.

—— 1911 A

Skull of *Triceratops prorsus* in the British Museum.

Nature, LXXXVII, 301.

—— 1912 A

The Permian Amphibia and Reptilia of North America.

Geol. Mag. (5), IX, 519-520.

An unsigned review of Case, 1911 A, Case, 1911 B, and Williston, 1911 B.

—— 1912 B

[An interesting specimen of fossil walrus.]

Amer. Mus. Jour., XII, 269.

—— 1912 C

Skull of *Triceratops* in the British Museum.

Nature, LXXXIX, 509.

—— 1914 A

Contributions to Canadian palæontology.

Canad. Rec. Sci., IX, 383-386.

—— 1916 A

Model of *Dinichthys.*

Amer. Mus. Jour., XVI, 140.

—— 1916 B

Museum notes.

Amer. Mus. Jour., XVI, 474-480, 2 figs.

—— 1916 C

Skull of *Monoclonius.*

Nature, XCVIII, 133.

—— 1917 A

Osborn on *Ornitholestes.*

Nature, XCIX, 213.

—— 1917 B

A huge extinct bird.

Scient. Amer., CXVII, 379.

—— 1921 A

Notes on fossil vertebrates.

Nat. Hist., XXI, 323-324, 2 figs.

Anonymous—Continued 1921 B
Note on crocodiles.
Nat. Hist., xx, 433.

—— 1921 C
Notes on fossil edentates.
Nat. Hist., xxi, 557-558.

—— 1922 A
Fossil vertebrates.
Nat. Hist., xxii, 92, 184.

—— 1922 B
The Cohoes mastodon.
Nat. Hist., xxii, 282, fig.

—— 1922 C
The first mounted skeleton of a dinosaur, *Hadrosaurus*.
Nat. Hist., xxii, 382, fig.

—— 1923 A
A forerunner of the horned dinosaurs.
Nat. Hist., xxiii, 192.

—— 1923 B
Palæontology at the American Museum of Natural History.
Nat. Hist., xxiii, 411-413.

—— 1923 C
Note on *Hesperopithecus*.
Nature, cxi, 406.

—— 1924 A
Ape of the western world restored.
Nat. Hist., xxiv, 273-274.

—— 1924 B
The excavation of the Peale mastodon.
Nat. Hist., xxiv, 410-411, 1 fig.

—— 1927 A
The antiquity of man in America.
Scient. Monthly, May 1927, 477, 479.

Antevs, Ernst 1925 A
On the Pleistocene history of the Great Basin.
Carnegie Instn. Wash. Pub. No. 352, 51-114, 3 pls., 19 text-figs.
Pages 104-114 are occupied by the extensive bibliography.

Anthony, H. E. 1916 A
Habits of *Aplodontia*.
Bull. Amer. Mus. Nat. Hist., xxxv, 53-59, 8 figs.

Anthony, Raoul 1903 A
L'évolution du pied humain.
Rev. Scient. Paris (4), xix, 129-139, text-figs. 8-21.
Translated into English in Rep. Smithson. Instn., 1903, 519-535, 13 text-figs.

Anthony, Raoul—Continued 1905 A
Le rôle du muscle crotaphyte, dans la morphogénie du crâne des mammifères.
C. R. Assoc. franc. Avanc. Sci., xxxiii (Grenoble, 1904), Notes et Mem., 853-855.

—— 1910 A
L'adaptation à la locomotion aérienne chez les vertébrés.
Rev. Scient. Paris, xlviii, 777-785, figs. 72-79.

—— 1912 A
Contribution a l'étude morphologique générale des caractères d'adaptation à la vie arboricole chez les vertébrés.
Ann. Sci. Nat. (9), xv, 101-342, 74 text-figs.
On pages 102-103 are recorded 36 titles.

—— 1913 A
The morphology of the shoulder girdle.
C. R. Congr. Internat. Med., xvii, London, Anat., Emb., pt. i, 239-272.
For brief discussion by T. H. Bryce and reply by Anthony see pt. ii, 87.

——, and H. **Vallois** 1914 A
Sur la signification des éléments ventraux de la ceinture scapulaire chez les batraciens.
Bibl. Anat., xxiv, 218-276, 35 text-figs.
This paper presents a bibliography of the subject.

Anton, Wilhelm 1911 A
Die Nasenhöhle der Perennibranchiaten.
Morphol. Jahrb., xliv, 179-199, pls. iv, v, 1 text-fig.
The bibliography includes 13 titles.

Antonius, Hellmut Otto 1920 A
Bemerkungen über einige Säugetierschädel von Sardinien.
Proc. Akad. Wet. Amsterdam, xxiii, 37-43.

Antonius, Otto 1912 A
Die Rassengliederung der quartären Wildpferde Europas.
Verh. zool.-bot. Ges. Wien, lxii, (64-78).

—— 1913 A
Equus abeli nov. spec. Ein Beitrag zur genaueren Kenntnis unserer Quartärpferde.
Beitr. Pal. Geol. Oesterr.-Ung., xxvi, 1913, 241-301, pls. xvi-xxi.
Besides matter on European extinct horses, this work presents remarks on the osteology and dentition of Equidæ in general and numerous measurements of parts of the skeleton of horses, asses and zebras.

JUNIOR COLLEGE LIBRARY

Antonius, Otto—Continued 1913 B

Equidenstudien. I: Über das Aussehen des Tarpans.

Verh. zool.-bot. Ges. Wien, LXII, 235-240, 1 text-fig.

—— 1918 A

Die Abstammung des Hauspferdes und des Hausesels.

Naturwiss. Berlin, VI, 13-18; 32-34.

The bibliography comprises 11 titles.

—— 1919 A

Untersuchungen über den phylogenetischen Zusammenhang zwischen *Hipparion* und *Equus*.

Zeitschr. indukt. Abstam. Vererbl., XX, 273-295.

There is a bibliography of 15 titles.

—— 1922 A

Über europäische fossile Pferde.

Palaeont. Zeitschr., IV, 133.

—— 1923 A

Neues über *Hipparion* und die Phylogenie der Equiden.

Verh. zool.-bot. Ges. Wien, LXXIII, (31)-(33).

Appleton, A. B. 1922 A

On the hypotrochanteric fossa and accessory adductor groove of the primate femur.

Jour. Anat. Lond., LVI, 295-306, 5 figs.

There is a bibliography of 7 figs.

Arambourg, Camille 1921 A

Sur un scopélidé fossile à organes lumineux: *Myctophum prolaternatum* n. sp. du Sahélien oranais.

Bull. Soc. géol. France (4), XX, 233-239, pl. ix, 1 text-fig.

Ardley, Edward 1916 A

Note on the discovery of a skeleton of *Beluga catodon* (white whale) in the Pleistocene Clay (Leda Clay) at the town of Montreal East, Quebec.

Canad. Rec. Sci., IX, 490-493.

Arey, Melvin F. 1906 A

Geology of Black Hawk County [Iowa].

Iowa Geol. Surv., XVI, 409-452, map, pl. VI, 3 text-figs.

Arldt, Th. 1907 A

Die älteste Säugetierfauna Südamerikas und ihre Beziehungen.

Arch. Naturges., LXXIII, Bd. I, 233-244.

—— 1907 B

Die Säugetierwelt Südamerikas.

Zool. Jahrb. Syst., XXV, 445-460.

Arldt, Th.—Continued 1907 C

Zur Atlantisfrage.

Naturw. Wochenschr., XXII (n.s. VI), 673-679, 1 map.

—— 1907 D

Die Entwicklung der Kontinente und ihrer Lebewelt: ein Beitrag zur vergleichenden Erdgeschichte.

I-XIX+1-730 pages, 17 figs., 23 maps.

—— 1907 E

Paläogeographisches zum Stammbaum des Menschen.

Zeitschr. Morphol. Anthrop., X, 203-215, pl. XV.

—— 1908 A

Theromorphe Reptilien.

Naturw. Rundschau, XXIII, 569-571, 585-587.

—— 1909 A

Die Dinosaurier.

Naturw. Rundschau, XXIV, 261-263.

—— 1909 B

Die Stegocephalen und ihre Stellung unter den Wirbeltieren.

Naturw. Rundschau, XXIV, 353-355.

—— 1909 C

Fossile Pferde Nordamerikas.

Naturw. Rundschau, XXIV, 457-458.

—— 1909 D

Die fossile Schildkröte Nordamerikas.

Naturw. Rundschau, XXIV, 652-654.

—— 1911 A

Die Feststellung von Entwicklungsgebieten und Verbreitungszentren.

Arch. Naturges., LXXVII, pt. 1, 211-231.

—— 1912 A

Die Fauna der alten Tierregionen des Festlandes.

Neues Jahrb. Min., Geol. Pal., Beil.-Bd. XXXIV, 633-782.

—— 1913 A

Die geologische und geographische Verbreitung der Primaten.

Polit.-anthrop. Revue, Berlin, XII, 82-96 (Not seen).

—— 1916 A

Die Ausbreitung der Lurche.

Arch. Naturges., LXXXII, A, Heft. 6, 94-151.

Arldt, Th.—Continued 1923 A

Zur Ausbreitungsgeschichte der Fische, besonders der Fische der Kontinentalen Gewässer.

Arch. Hydrobiol., XIV, 478-522, 673-719.

Numerous references to the literature in foot-notes. Pages 703-719 are mostly taken up by tables showing the geographical and geological distribution of the families of fishes.

Arloing, S. 1867 A

Contribution à l'étude de l'organisation du pied chez le cheval.

Ann. Sci. nat. (5), VIII, 55-81, pls. i, ii.

Discusses polydactyly in horses.

Arnell, David R. 1809 A

A geological and topographical history of Orange County, New York.

Med. Reposit. N. Y., XII (VI of 2d hexade), 313-323.

Arnold, Ralph 1903 A

The palæontology and stratigraphy of the marine Pliocene and Pleistocene of San Pedro, California.

Mem. Calif. Acad. Sci., III, 1-420, pls. i-xxxvii.

For a review by J. C. Merriam see Science (n.s.), XIX, 540.

—— 1907 A

The Los Angeles oil district, southern California.

Bull. U. S. Geol. Surv., CCCIX, 138-266, maps and plates.

——, and Robert **Anderson** 1910 A

Geology and oil resources of the Coalinga district, California.

Bull. U. S. Geol. Surv., CCCXCVIII, 1-354, pls. i-lii, 9 text-figs.

——, and H. **Hannibal** 1913 A

The marine Tertiary stratigraphy of the North Pacific coast of America.

Proc. Amer. Philos. Soc., LII, 559-605, pls. xxxvii-xlviii.

Arsène, G., and Pierre **Marty** 1923 A

Sur quelques empreintes de feuilles fossiles de la Loma del Zapote à Morelia, Michoacan (Mexique).

1-16 pages, with map and plates of fossil plants. Issued privately. Printed at Covington, Louisiana. A few notes on fossil elephants.

Arthaber, Gustav 1906 A

Beiträge zur Kenntnis der Organisation und der Anpassungsercheinungen des Genus *Metriorhynchus.*

Beitr. Pal. Geol. Oesterr.-Ung., XIX, 1906, 287-320, pls. xxii-xxvii, 9 text-figs.

Arthaber, Gustav—Continued 1910 A

Ueber Bewegungen der Schädelknochen (Streptostylie) bei fossilen Reptilien.

Mitt. Geol. Ges. Wien, III, 552-555.

—— 1919 A

Studien über Flugsaurier und Bearbeitung des Wiener Exemplares von *Dorygnathus banthensis* Theod. sp.

Anz. Akad. Wiss. Wien, LVI, 93-95.

Abstract in Geol. Zentralbl., XXV, 232.

—— 1919 B

Studien über Flugsaurier auf Grund der Bearbeitung des wiener Exemplares von *Dorygnathus banthensis* Theod. sp.

Denk. Akad. Wiss. Wien, XCVII, 391-464, pls. i, ii, 57 text-figs.

The bibliography occupies pages 461-464.

—— 1921 A

Über Entwicklung, Ausbildung und Absterben der Flugsaurier.

Palaeont. Zeitschr., IV, 1-47, 18 figs.

The bibliography presents 62 titles.

Abstracts in Geol. Zentralbl., XXVII, 58; XXXII, 234.

—— 1924 A

Die Phylogenie der Nothosaurier.

Jour. Comp. Neur., XXXIV, 439-516, 35 figs.

The bibliography comprises 58 titles.

Ash, F. H. 1908 A

The evolution of the cetacean tail-fin.

Trans. N. Staffords Field Club, 1908-9, XLIII, 78-82.

Issued separately 1908.

Ashley, George H. 1895 A

The Neocene stratigraphy of the Santa Cruz Mountains of California.

Proc. Calif. Acad. Sci. (2), V, 273-367, pls. xxii-xxv.

Assmann, Paul. 1906 A

Über *Aspidorhynchus.*

Arch. Biontol. (Ges. naturf. Freunde, Berlin), I, 49-79, pls. vi, vii, 6 text-figs.

The bibliography presents 25 titles.

Atthey, T. 1868 C

Notes on the remains of some reptiles and fishes from the shales of the Northumberland coal-field.

Ann. Mag. Nat. Hist. (4), I, 346-378, pls. xiv-xvi.

Atzkern, J. 1923 A

Zur Entwicklung des Os cornu der Cavicornier.

Anat. Anz., LVII, 125-130.

The bibliography includes 27 titles.

Auer, Erwin 1909 A
Über einige Krokodile der Juraformation.
Palaeontogr., LV, 217-294, pls. xxii-xxvi, 15 text-figs.

Auer, Kurt 1914 A
Die Wirbelsäule der Katze.
Arch. Anat. Physiol. Leipzig, 1914, 197-205, 1 text-fig.

Auerbach, M. 1908 A
Auerochs und Wisent in Deutschland.
Ver. naturw. Ver. Karlsruhe, XX (1906-1907), 3-32, 9 figs.

Aughey, Samuel 1876 A
The superficial deposits of Nebraska.
Rep. U. S. Geol., Surv. Terrs., Hayden, for 1874, 243-269, text-figs.

Augustin, Willy 1913 A
Die Formvariabilität der Beckenknochen bei nord-atlantischen Bartenwalen.
Zool. Jahrb. Syst., XXXV, 533-580, pls. XIX, XX.

Aulmann, Georg 1909 A
Die Mundrachenwand der Vögel und Säuger.
Morphol. Jahrb., XXXIX, 34-81, pls. IV-VII, 47 text-figs.

Aureggio, —— 1914 A
Chevaux du nord de l'Afrique, autrefois et aujourd'hui. Animaux domestiques nord-africains.
C. R. Assoc. franc. Avanc. Sci., 1913, 42me sess., Tunis, 337-346.

Aurivillius, Carl W. S. 1886 A
Osteologie und äussere Erscheinung des Wals Sowerby's (*Micropteron bidens* Sow.).
Bihang svenska Vet. Akad. Hand., XI, No. 10, 1-40, 2 pls.
Deals with the osteology.

Ayers, Howard 1885 A
Beiträge zur Anatomie und Physiologie der Dipnoer.
Jena. Zeitschr. Naturwiss., XVIII (N.F., XI), 479-527, pls. XVI-XVIII.
The literature cited embraces 37 titles.
The paper deals with the soft anatomy.

—— 1906 A
The unity of the gnathostome type.
Amer. Naturalist, XL, 75-94.

Aymard, Auguste 1850 A
Concernant les restes de mammifères fossiles recueillis dans le calcaire miocène des environs du Puy.
Ann. Soc. Agric. Puy, XIV, for 1849, 104-114.

Aymard, Auguste—Continued 1851 A
Du *Cynodon*, mammifère carnassier fossile trouvé dans les calcaires marneux de Ronzon, près le Puy.
Ann. Soc. d'Agric. Puy, XV, 92-122, plate.

Ayres, William O. 1863 A
Notes on the sebastoid fishes occurring on the coast of California.
Proc. Zool. Soc. Lond., 1863, 390-402, 9 figs.

Bach, Franz 1909 A
Zur Kenntnis obermiocäner Rhinocerotiden.
Jahrb. geol. Reichsanst. Wien, LVIII, 761-776, pl. XXIX.

—— 1910 A
Mastodonreste aus der Steiermark.
Beitr. Pal. Geol. Oesterr.-Ung., XXIII, 1910, 63-124, pls. VII-X, 5 text-figs.

Bach, Rudolph 1914 A
Ein prächtiges Dinosaurier-Exemplar.
Prometheus, XXV, 347-348, 1 text-fig.
A popular account of a skeleton of *Trachodon marginatus* in collection of Geological Survey at Ottawa, Canada.

Backman, Gaston 1913 A
Die Bauchflosse der Selachier. Erste Abtheilung: Die Bauchflosse der *Batoidei*.
Svensk. Vet. Akad. Handl., I, art. 7, 1-141, pls. i-xi.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 142-144.

—— 1915 A
Die Bauchflosse der Selachier. Zweite Abteilung: Die Bauchflosse der Holocephali.
Svensk. Vet. Akad. Handl., LIII, art. 3, 1-63, pls. i-iv.

Baehr, W. B. 1906 A
Ueber das von Eimer beschriebene Brustbein vom Karpfen (*Cyprinus carpio*).
Zool. Jahrb. Anat., XXII, 629-636.

Baer, K. E. 1836 A
L'anatomie des cétacés.
L'Institut, Paris, IV, 409-410.

Bärthold, —— 1904 A
Artunterschiede am Säugetierschädel.
Zeitschr. Naturw., LXXVI, 365-368.

Bäumler, Hans 1922 A
Die morphologischen Veränderungen des Schweineschädels unter dem Einfluss der Domestikation.
Arch. Naturges., LXXXVII, Abt. A, Heft. 12, 140-178.
The bibliography presents 25 titles.

Bagg, Rufus M. 1909 A
Notes on the distribution of the mastodon in Illinois.
Univ. Ill. Bull., VI, 47-56, pl. iv and a map of distribution.

Bailey, Thomas L. 1926 A
The Gueydan, a new Middle Tertiary formation from the southwestern coastal plain of Texas.
Univ. Texas Bull. No. 2645, 1-187, pls. i-xii.

Bailey, Vernon 1897 A
Revision of the American voles of the genus *Evotomys*.
Proc. Biol. Soc. Wash., XI, 113-138, pl. iii.

—— 1900 A
Revision of American voles of the genus *Microtus*.
N. A. Fauna, No. 17, 1-88, pls. i-v, 17 text-figs.

—— 1915 A
Notes on the variation, distribution and habits of pocket-gophers of the genus *Thomomys*.
Jour. Wash. Acad. Sci., V, 410.

—— 1915 B
Revision of the pocket-gophers of the genus *Thomomys*.
N. A. Fauna, No. 39, 1-136, pls. i-viii, 10 text-figs.

—— 1923 A
Buffalo in Oregon.
Jour. Mamm., IV, 254-255.

Bailey, William Hellier 1876 A
Description of a new species of labyrinthodont Amphibia from the coal at Jarrow colliery, near Castlecomer County, Kilkenny.
Rep. Brit. Assoc. Adv. Sci., XIV, 1875 (1876), Bristol, Sec. Geol., 62-63.

Bain, H. Foster 1896 A
Geology of Woodbury County [Iowa].
Iowa Geol. Surv., 1895, V, 243-299, with maps.

Baird, H. S. 1922 A
The occipital bones of the Dipnoi.
Proc. Roy. Soc. Victoria (n.s.), XXXV, 115-116.

Baird, S. F. 1850 B
Revision of the North American tailed-batrachia, with descriptions of new genera and species.
Jour. Acad. Nat. Sci. Phila. (2), I, 281-294.

Baird, S. F.—Continued 1876 A
Ann. Rec. of Sci., Indust., for 1875, 8vo., i-ccxc+1-656 pages.

——, and C. **Girard** 1853 A
Catalogue of North American reptiles. Pt. I: Serpents.
Washington, Smithson. Instn., i-xvi+1-172 pages.

Baker, Charles Laurence 1915 A
Geology and underground waters of the northern Llano Estacado.
Bull. Univ. Texas, LVII, 225, pls. i-x and maps.

Baker, Frank Collins 1920 A
The life of the Pleistocene, or Glacial, period.
Univ. Ill. Bull., XVII, i-xiv+1-476 pages, pls. i-lvii, 5 text-figs.
In this extensive work the plants, the invertebrates and the vertebrates are considered. The bibliography occupies pages 404-451. In the present Bibliography and Catalogue of Fossil Vertebrata the citations are made in part to Baker's index, pages 453-476.
Review by Shufeldt in The Auk, vol. XXXVII, 634.

—— 1920 B
Animal life in loess deposits near Alton, Illinois, with descriptions of two new varieties of land shells from the same deposit.
Nautilus, XXXIV, 61-66.

—— 1921 A
Baker's "Life of the Pleistocene."
Auk, XXXVIII, 155-156.

Balch, Edwin Swift 1917 A
Early man in America.
Proc. Amer. Philos. Soc., LVI, 472-483.

Baldwin, S. Prentiss 1894 A
Pleistocene history of the Champlain Valley.
Amer. Geologist, XIII, 170-184, 2 figs.

Ballard, F. A. 1880 A
Mastodon remains found in Jackson County, Missouri.
Kansas City Rev. Sci. Indust., III, 643-644, 1 fig.

Ballerstedt, M. 1914 A
Bemerkungen zu den älteren Berichten über Saurierfährten im Wealdensandstein und Behandlung einer neuen, aus 5 Fussabdrücken bestehenden Spur.
Centralbl. Min., Geol., Pal., 1914, 48-64, 4 text-figs.

Ballerstedt, M.—Continued 1921 A

Über das Plastron der Schildkröten des Keupers und die Gestalt der Panzerschale von *Proganochelys quenstedtii* Baur nach dem Tübinger Fossil.

Palaeont. Zeitschr., IV, 64-74, 3 figs.
Abstract in Geol. Centralbl., XXXII, 476.

Ballou, W. H. 1897 A

Strange creatures of the past, Gigantic saurians of the reptilian age.

Cent. Mag. (n. s.), XXXIII (o. s. LV), 1897, 15-23, with reproductions of figures by Charles Knight.
The facts in this paper were communicated by Prof. E. D. Cope.

—— 1898 A

The serpent-like sea saurians.

Pop. Sci. Month., LIII, 209-225, 2 pls., 6 text-figs.

Ballowitz, E. 1892 A

Das Schmelzorgan der Edentaten, seine Ausbildung im Embryo und die Persistenz seines Keimrandes bei dem erwachsenen Thier.

Arch. mikr. Anat. Bonn., XL, 133-156, pls. vi, vii.

Bancroft, Hubert Howe 1875 A

The native races of the Pacific states of North America. Vol. IV: Antiquities.

New York. 8vo., i-vii+1-807 pages, with numerous illustrations.

Bangs, Outram 1896 A

A review of the weasels of eastern North America.

Proc. Biol. Soc. Wash., X, 1-24, pls. i-iii.

—— 1896 B

The Florida deer.

Proc. Biol. Soc., Wash., X, 25-28.

—— 1896 C

The skunks of the genus *Mephitis* of eastern North America.

Proc. Biol. Soc. Wash., X, 139-144.

—— 1896 D

A review of the squirrels of eastern North America.

Proc. Biol. Soc. Wash., X, 145-167, pls. viii-x, text-figs. 29-32.

—— 1897 A

Notes on the lynxes of eastern North America, with descriptions of two new species.

Proc. Biol. Soc. Wash., XI, 47-51, pl. ii.

Bangs, Outram—Continued 1898 A

The land mammals of peninsular Florida and the coast region of Georgia.

Proc. Bost. Soc. Nat. Hist., XXVIII, 157-235, with map and text-figs.

Bannister, Henry M. 1870 A

Geology of DeKalb, Kane and DuPage Counties [Illinois].

Geol. Surv. Ill., IV, 111-125.

Baraldi, G. 1877 A

Omologia fra gli organi accessori della respirazione dei pesci, etc.

Atti Soc. Toscano Sci. Nat., III, 1-56, pl. v.

Barbour, Carrie Adeline 1898 A

Some methods of collecting, preparing and mounting fossils.

Proc. Neb. Acad. Sci., for 1896, 258-264, 1 text-fig.

Barbour, Erwin H. 1892 A

On a new order of gigantic fossils.

Univ. Neb. Stud., I, 301-323, pls. i-v, 18 text-figs.

—— 1894 A

Additional notes on the new fossil *Daimonelix*. Its mode of occurrence; its gross and minute structure.

Univ. Neb. Stud., II, 1-16, 12 pls.

—— 1896 A

Progress made in the study of *Daemonelix*.

Proc. Neb. Acad. Sci., 1894-1895, 24-28, 18 text-figs.

—— 1903 A

Report of the State Geologist.

Neb. Geol. Surv., I, 1-258, 12 pls., 163 text-figs.

—— 1903 B

Present knowledge of the distribution of *Daimonelix*.

Science (n.s.), XVIII, 504-505.

—— 1905 A

Notice of a new fossil mammal from Sioux County, Nebraska.

Neb. Geol. Surv., II, pt. 3, 1-4, 1 plate.

—— 1905 B

A new Miocene artiodactyl.

Science (n.s.), XXII, 797-798, 1 text-fig.
Abstract in Geol. Centralbl., VIII, 373.

—— 1906 A

The skull of *Syndyoceras*.

Science (n.s.), XXIII, 288-289.

—— 1906 B

The skulls of *Syndyoceras* and *Protoceras*.

Science (n.s.), XXIII, 623.

Barbour, Erwin H.—Continued 1906 C
Notice of a new Miocene rhinoceros, *Diceratherium arikarense*.
Science (n.s.), XXIV, 780-781, 2 text-figs.

—— 1906 D
Notice of a new fossil rhinoceros from Sioux County, Nebraska.
Neb. Geol. Surv., II, 311-318, 5 text-figs.
Describes *Diceratherium arikarense*.

—— 1908 A
The skull of *Moropus*.
Neb. Geol. Surv., III, 207-216, pls. i, ii, 5 text-figs.

—— 1908 B
Skeletal parts of *Moropus*.
Neb. Geol. Surv., III, 217-222, pls. i-xi, 1 text-fig.

—— 1909 A
A slab from the bone beds of Sioux County.
Neb. Geol. Surv., III, 249-252, pl. i.

—— 1909 B
Restoration of *Diceratherium arikarense;* a new form of panel mount.
Neb. Geol. Surv., III, 253-258, pl. i.

—— 1912 A
Skull of the giant hog *Elotherium*. A panel mount.
Neb. Geol. Surv., IV, 50-51, pl. i.

—— 1913 A
A tooth of the Columbian mammoth.
Neb. Geol. Surv., IV, 58-65, pls. i, ii, 1 text-fig.

—— 1914 A
A new fossil horse, *Hypohippus matthewi*.
Neb. Geol. Surv., IV, 169-173, pls. i, ii, 1 text-fig.
See also Univ. [Neb.] Studies, XIV, 197-199, pl. xiv.

—— 1914 B
Mammalian fossils from Devil's Gulch.
Neb. Geol. Surv., IV, 177-190, pls. i-xiii.
See also Univ. [Neb.] Studies, XIV, 185-197, pls. i-xiii.

—— 1914 C
A new longirostral mastodon from Cherry County, Nebraska.
Neb. Geol. Surv., IV, 213-322, pls. i-vi, 6 text-figs.

—— 1915 A
A new longirostral mastodon. *Tetrabelodon lulli*. Preliminary notice.
Amer. Jour. Sci. (4), XXXIX, 87-92, 2 figs.

Barbour, Erwin H.—Continued 1915 B
A new Nebraska mammoth, *Elephas hayi*.
Amer. Jour. Sci. (4), XL, 129-134, 5 text-figs.
Abstract in Geol. Zentralbl., XXV, 271.

—— 1915 C
A new mount of the fossil tortoise, *Testudo orthopygia*.
Neb. Geol. Surv., IV, 335-336, 2 text-figs.

—— 1916 A
A giant Nebraska bear, *Dinarctotherium merriami*.
Neb. Geol. Surv., IV, 349-353, 6 figs.

—— 1916 B
Evidence of the ligamentum teres in Nebraska Proboscidea.
Amer. Jour. Sci. (4), XLI, 251-254, 6 figs.
Abstract in Geol. Zentralbl., XXV, 270.

—— 1916 C
A new longirostral mastodon from Nebraska, *Tetrabelodon osborni*.
Amer. Jour. Sci. (4), XLI, 522-529, 4 figs.
Abstract in Geol. Zentralbl., XXV, 270.

—— 1917 A
The Boyd County mastodon *Tetrabelodon osborni*.
Neb. Geol. Surv., IV, 499-512, 12 figs.

—— 1924 A
A preliminary report on the Nebraska State Museum.
Bull. Neb. State Mus., I, No. 1, 1-19, 6 figs.

—— 1925 A
A new primitive mammoth from Nebraska.
Bull. Neb. State Mus., I, No. 2, 21-24, figs. 7-12.

—— 1925 B
Prosthennops xiphodonticus sp. nov. A new fossil peccary from Nebraska.
Bull. Neb. State Mus., I, No. 3, 25-31, figs. 12, 13.

—— 1925 C
Tetrabelodon abeli sp. nov.
Bull. Neb. State Mus., I, No. 9, 91-94, figs. 52-57.

—— 1925 D
Skeletal parts of the Columbian mammoth, *Elephas maibeni* sp. nov.
Bull. Neb. State Mus., I, No. 10, 95-118, figs. 58-87.

—— 1926 A
Archidiskodon maibeni.
Bull. Neb. State Mus., I, 119-122. fig. 88.

Barbour, Erwin H.—Continued 1927 A
Preliminary notice of a new proboscidean, *Amebelodon fricki* gen. et sp. nov.
Bull. Neb. State Mus., I, No. 13, 131-134, figs. 89-91.

——, and Harold J. **Cook** 1914 A
Two new fossil dogs of the genus *Cynarctus* from Nebraska.
Neb. Geol. Surv., IV, 225-227, pl. i, 1 text-fig.

—— 1914 B
A new saber-toothed cat from Nebraska.
Neb. Geol. Surv., IV, 235-238, pl. i, 4 text-figs.

—— 1917 A
Notes on the skull of *Metoreodon*.
Neb. Geol. Surv., VII, pt. 18, 165-172, 8 text-figs.

—— 1917 B
Skull of *Ælurodon platyrhinus* sp. nov.
Neb. Geol. Surv. VII, pt. 19, 173-180, 11 text-figs.

Barbour, Thomas 1916 A
Remarks upon Matthews' "Climate and Evolution."
Ann. N. Y. Acad. Sci. XXVII, 1-15. Followed by supplementary note by W. D. Matthew.

—— 1926 A
A note on Tertiary alligators.
Copeia, No. 151, 109-111.

——, and G. M. **Allen** 1922 A
The white-tailed deer of eastern United States.
Jour. Mamm., III, 65-78, pls. iv, v.
There is a bibliography of 15 titles.

Bárcena, Mariano 1882 A
El Museo nacional de Mexico; seccion de geología y paleontología.
Revista cient. Mexicana, I, No. 20, 20.

Bardeen, Charles R. 1905 A
The development of the thoracic vertebræ in man.
Amer. Jour. Anat., IV, 163-174, pls. i-vii.
There is a bibliography of 29 titles.

—— 1905 B
Studies of the development of the human skeleton.
Amer. Jour. Anat., IV, 265-302, pls. i-xii.
There is a bibliography of 74 titles. The paper treats of the spinal column and the posterior limbs.

Bardeleben, K. 1885 A
Zur Entwickelung der Fusswurzel.
Jena. Zeitschr. Naturwiss. Suppl., XIX, 27-32.

—— 1885 B
Zur Morphologie des Hand- und Fusskelets.
Jena. Zeitschr. Naturwiss. Suppl., XIX, 84-88.

—— 1885 C
Ueber neue Bestandteile der Hand- und Fusswurzel der Säugethiere, sowie die normale Anlage von Rudimenten "überzähliger" Finger und Zehen beim Menschen.
Jena. Zeitschr. Naturwiss. Suppl., XIX, 149-166.

—— 1889 A
Praepollex und praehallux.
Anat. Anz., IV, Ergänzungsh., 106-112, 6 text-figs.

—— 1889 B
On the praepollex and praehallux, with observations on the carpus of *Theriodesmus phylarchus*.
Proc. Zool. Soc. Lond., 1889, 259-262, pl. xxx.

—— 1893 A
Knochen, Bänder, Muskeln.
Anat. Hefte, Ergebn., II, 156-178.
A review of the literature. A list of 75 works on the subject is included.

—— 1896 A
Knochen, Bänder, Muskeln.
Anat. Hefte, Ergebn., V, 95-126.
A review of the literature. There is a bibliography of 318 titles.

—— 1901 A
Skelettsystem (ausser Schädel und Visceralskelett).
Anat. Hefte, Ergebn., X, 1-114.
This paper is preceded by a bibliography of 290 titles.

—— 1903 A
Skeletsystem ausser Kopf (einschliesslich Gelenke und Gelenkmechanik).
Anat. Hefte, Ergebn., XII, 3-41.
A résumé of progress; preceded by a bibliography of 189 titles.

—— 1904 A
Skelet ausser Kopf (einschliesslich Gelenke und Gelenkmechanik). Literatur 1903.
Anat. Hefte, Ergebn., XIII, 95-114.
This résumé of progress is preceded by a bibliography of 70 titles.

Bardeleben, K.—Continued 1905 A

Die Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 16.

A brief note, followed by brief discussions. See also C. R. Assoc. Anat., 1905, VII, 140; Verh. Anat. Ges., XIX, 16-17.

—— 1905 B

Die Nicht-Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 138-139.

—— 1905 C

Über den Unterkiefer der Säugetiere.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1905, 156-159.

—— 1905 D

Spezielle Anatomie und Entwicklungsgeschichte des Menschen und der Wirbeltiere. IV: Skeletsystem. B. Chorda dorsalis, Wirbelsaule, Rippen, Sternum.

Jahresber, Anat. Entwickl. (N.F.), X, Abth. 3, 92-101.

On page 92 is presented a list of the papers reviewed on the succeeding pages.

—— 1905 E

Der Unterkiefer der Säugetiere, besonders des Menschen.

Anat. Anz., XXVI, 104-111.

—— 1906 A

Skelet (ausser Schädel und Viszeralskelet). 1904 und 1905.

Anat. Hefte, Ergebn., XV, 119-151.

This review is preceded by a bibliography of 118 titles.

—— 1907 A

Zur vergleichenden Anatomie, besonders Paläontologie des Unterkiefers der Wirbeltiere.

Anat. Anz., Ergänzungsh., XXX, 34-37.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 37.

—— 1907 B

Skelet (ausser Kopf) and Muskeln.

Anat. Hefte, Ergebn, XVI, 141-165.

The bibliography consists of 69 titles.

—— 1909 A

Ueber bilaterale Asymmetrie beim Menschen und bei höheren Tieren.

Anat. Anz., Ergänzungsh., XXXIV, 2-72.

The bibliography is recorded in pages 63-72.

Bardenfleth, K. S. 1913 A

Notes on the form of the carnassial tooth of carnivorous mammals. (With a critical sketch of the most important tooth-cusp theories.)

Vid. Medd. nat. For. Kjobenh., LXV, 67-111, 15 text-figs.

With a list of about 50 papers.

Abstracts in Sci. Progress, VIII, 630; Nature, XCI, 595.

Barkas, T. P. 1869 A

Climaxodus ovatus and *Diplodus.*

Geol. Mag., VI, 42.

—— 1869 B

Unusual forms of *Ctenoptychius.*

Geol. Mag., VI, 43, 2 text-figs.

Barkas, W. J. 1874 B

Hybodus, a Coal-measure fish.

Geol. Mag. (n.s.), I, 163-168, 239, 6 text-figs.

—— 1874 C

Hybodus, a Coal-measure fish.

Geol. Mag. (n.s.), I, 287-288.

—— 1874 D

List of Palæozoic fishes.

Geol. Mag. (n.s.), I, 542-553.

Barney, R. L., and B. J. Anson 1923 A

Life history and ecology of the orange-spotted sunfish, *Lepomis humilis.*

Rep. U. S. Comm. Fish., 1922 (1923), app. 15 (Doc. 938), 1-16, 7 figs.

Barrell, Joseph 1907 A

Origin and significance of the Mauch Chunk shale.

Bull. Geol. Soc. Amer., XVII, 449-476, pls. xlix-lii, 1 text-fig.

—— 1915 A

Factors in movements of the strand line and their results on the Pleistocene and post-Pleistocene.

Amer. Jour. Sci. (4), XL, 1-22.

Abstract in Jour. Wash. Acad. Sci., V, 413-420.

—— 1915 B

Influence of Silurian-Devonian climates on the rise of air-breathing vertebrates.

Bull. Geo. Soc. Amer., XXVII, 387-436, 2 text-figs.

—— 1917 A

Probable relations of climatic change to the origin of the Tertiary ape-man.

Scient. Monthly, IV, 16-26.

Barrett-Hamilton, G. E. H. 1897 A
The Pacific walrus (*Trichechus obesus*).
Proc. Zool. Soc. Lond., 1897, 266-267.
This refers to *Odobenus divergens*.

Barrows, Walter B. 1885 A
Natural history of birds: Hawks, owls.
Stand. Nat. Hist., III, 260-348, figs. 124-157.

Barton, Benjamin Smith 1805 A
Letter to M. Lacépède of Paris, on the natural history of America.
Tilloch's Philos. Mag, XXII, 97-193, 204-211.

—— 1805 B
[On the *Megalonyx* of Mr. Jefferson.]
Phila. Med., Phys. Jour. I, pt. i, 152-154.

—— 1805 C
On the mammoths found at Big Bone Lick.
Phila. Med., Phys. Jour., I, pt. i, 154-159.

—— 1805 D
[Remarks on a communication from Mr. John Heckewelder regarding *Megalonyx*.]
Phila. Med., Phys. Jour., I, pt. ii, 164-165.

—— 1806 A
Facts, observations, and conjectures relative to the elephantine bones (of different species) that are found in various parts of North America. In a letter from the Editor to Mr. G. Cuvier, of Paris.
Phila. Med., Phys. Jour. First supplement, 22-34, with notes on this letter, 34-35.
Forms a part of the Archæologia Americana.

—— 1806 B
(Regarding specimens of mammoth).
Phila. Med., Phys. Jour., II, pt. i, 157.

—— 1806 C
[Remarks on skull of peccary from saltpeter cave in Kentucky.]
Phila. Med., Phys. Jour., II, pt. i, 158.

—— 1810 A
[Letter from Doctor Barton to Thomas Jefferson.]
The Portfolio, Philadelphia, (3) IV, 340-344.
The writer discusses the generic position of the mastodon of Ohio.

—— 1814 A
Archæologia Americanæ telluris collectanea et specimina.
Part I, Phila., 1814, 8vo., i-viii, 10-64.

Bassani, Francesco 1890 A
Colonna vertebrale di *Oxyrhina mantelli* Agassiz, scoperta nel Calcare Senoniano di Castellavazzo nel Bellunese.
Mem. Soc. ital. Sci. (3), VII, Mem. 1, 1-6, 3 pls.
This paper may have been issued in 1888 as a separate.

—— 1891 A
Contributo alla paleontologia della Sardegna ittioliti miocenici.
Atti Accad. Sci. Napoli (2), IV, No. 3, i-viii+1-60, pls. i, ii.
A bibliography occupies pages iii-viii.
There are full synonymies of the species.

—— 1895 A
Avanzi di *Carcharodon auriculatus* scoperti nel Calcare eocenico di Valle Gallina presso Avesa (provincia di Verona).
Mem. Accad. Agric., Verona, LXXI, 1-13, 1 plate.
Abstract in Neues Jahrb. Min. Geol. Pal., Ref., 527.

—— 1899 A
Abstract in Geol. Mag. (3), VIII, 476.

—— 1901 A
Il *Notidanus griseus* Cuvier nel Pliocene della Basilicata e di altre regione italiane e straniere.
Rend. Accad. Sci., Napoli (3), VII, 175-180, 1 fig.
Brief notice in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 315.

—— 1905 A
La ittiofauna delle argille marnose plistoceniche di Taranto e di Nardo (Terra d'Otranto).
Atti Accad. Sci. Napoli (2), XII, No. 3, 1-59, i-iii.
The bibliography is recorded on pages 3 to 8.

Bassler, Ray S. 1919 A
Report on work in paleontology.
Rep. U. S. Nat. Mus., 1918 (1919), 60-62.

Bassoli, G. G. 1906 A
Otoliti fossili tertiari dell' Emilia.
Riv. ital. Pal., XII, 36-58, pls. i, ii.
Citations of the literature in foot-notes.

Bate, Dorothea M. A. 1914 A
On remains of a gigantic land tortoise (*Testudo gymnesicus* n. sp.) from the Pleistocene of Menorca.
Geol. Mag. (6), I, 100-107, 2 text-figs.

Batelli, Andrea 1880 A
Beiträge zur Kenntniss des Baues der Reptilien.
Arch. mikr. Anat. Bonn, XVII, 346-361, pls. xxxiv, xxxv.

Bateson, W. 1892 A
On numerical variation in teeth, with a conception of homology.
Proc. Zool. Soc. Lond., 1892, 102-115, 6 figs.

Bauer, Franz 1901 A
Ichthyosaurus bambergensis spec. nov. Beschreibung einer neuen *Ichthyosaurus*-Art aus dem oberen Lias von Geisfeld, nebst einigen vergleichend-anatomischen Bemerkungen über den Schultergürtal.
Ber. naturf. Ges. Bamberg, XVIII, 1-56, pls. i, ii.

Baum, Hermann 1920 A
Anatomische Betrachtungen über die Zähne des Säugetiere.
Verh. Anat. Ges., XXIX, 17-27, figs. 1-19.

Baumgarten, [Hans] 1892 A
Beiträge zur Entwicklungsgeschichte der Gehörknöchelchen.
Arch. mikr. Anat. Bonn., XL, 512-530, pl. xxx.

Baur, Georg 1885 L
Preliminary note on the origin of limbs.
Amer. Naturalist, XIX, 1112.

—— 1885 M
Einige Bemerkungen über die Ossification der "langen" Knochen.
Zool. Anz., VIII, 580-581.

—— 1885 N
Zum Tarsus der Vögel.
Zool. Anz., VIII, 488.

—— 1886 N
Das Trapezium der Cameliden.
Morphol. Jahrb., VII, 117-118.

—— 1886 O
The intercentrum of living Reptilia.
Amer. Naturalist, XX, 174-175.

—— 1887 G
Remarks on *Hyperodapedon*, etc.
Quart. Jour. Geol. Soc., XLIII, 694.

—— 1887 H
Ueber das Quadratum der Säugethiere.
Sitz.-Ber. Ges. Morphol. Physiol. München., II, 45-57.
Same as Baur, G., 1886 A. See also Quart. Jour. Micr. Sci. (n.s.), XXVIII, 169-180.

Baur, Georg—Continued 1888 A
Dermochelys, *Dermatochelys* oder *Sphargis*.
Zool. Anz., XI, 44-45.

—— 1889 L
Palæohatteria Credner and the *Proganosauria*.
Amer. Jour. Sci. (3), XXXVII, 310-313.

—— 1890 F
Kadaliosaurus priscus Credner, a new reptile from the Lower Permian of Saxony.
Amer. Jour. Sci. (3), XXXIX, 156-158.

—— 1891 E
On the relations of *Carettochelys* Ramsay.
Amer. Naturalist, 631-638.

—— 1891 F
Intercalation of vertebræ.
Jour. Morphol; IV, 331-336.

—— 1892 D
Der Carpus der Schildkröten.
Anat. Anz., VII, 206-211, figs. 1-4.

—— 1893 D
Ueber Rippen und ähnliche Gebilde und deren Nomenclatur.
Anat. Anz., IX, 116-120.
13 titles in foot-notes.

—— 1894 B
Ueber den Proatlas einer Schildkröte (*Platypeltis spinifer* Les.).
Anat. Anz., X, 349-354, figs. 1-6.
The bibliography includes 30 titles.

—— 1896 D
Der Schädel einer neuen grossen Schildkröte (*Adelochelys*) aus dem Zoologischen Museum in München.
Anat. Anz., XII, 314-319, 4 figs.

—— 1896 E
Nachtrag zu meiner Mitteilung über die Morphologie des Unterkiefers der Reptilien.
Anat. Anz., XI, 569.
Relates to Baur G., 1895 D.

—— 1896 F
Historische Bemerkungen.
Internat. Monatsschr. Anat. Physiol., III, Heft. 1.
Reviews Paul Gervais' "Théorie du squelette humain," etc., 1886.

—— 1897 D
Remarks on the question of intercalation of vertebræ.
Zool. Bull., I, 41-55.

—— 1897 E
Amphibia or Batrachia.
Science (n.s.), VI, 170-174.

Baur, Georg—Continued 1897 F
Amphibia or Batrachia.
Science (n.s.), VI, 372.

—— 1898 A
Review of G. A. Boulenger: "On a nothosaurian reptile," etc.
Neues Jahrb. Min. Geol. Pal., 1898, I, Ref., 146-149.

Bayer, Franz 1897 A
Sur le tentorium osseum chez les mammifères.
Bibl. Anat., V, 147-150, pls. i, ii.

—— 1908 A
Neue Reste der Gattung *Portheus* Cope (*Xiphactinus* Leidy) aus der böhmischen Kreide.
Trans. Bohem. Acad. Sci., XVII, art. 19, 1-11, 1 pl., 4 text-figs.
Rozpr. Cheské Ak. Frant. Jos., 1908 (12), 1 pl.
Title and text in Bohemian.

—— 1909 A
Neue Reste von *Portheus* Cope (*Xiphactinus* Leidy) aus dem böhmischen Turon.
Bull. internat. Acad. Sci., Prague, XIV, 98-103, pl., 4 text-figs.

Bayley, W. S., H. B. **Kümmel,** and R. D. **Salisbury** 1914 A
Description of the Raritan [N. J.] quadrangle.
Folio No. 191, U. S. Geol. Surv., 1-33, 5 maps, 21 text-figs.

Bean, Barton A. 1904 A
Notes on an adult goblin shark (*Mitsukurina owstoni*) of Japan.
Proc. U. S. Nat. Mus., XXVIII, 815-818, 2 text-figs.

Beard, J. Carter 1901 A
Three characteristic types of American dinosaurs.
Scient. Amer. LXXXIV, 184-185, one figure.

—— 1901 B
Something about ancient American saurians.
Scient. Amer., LXXXV, 267, one figure.
A brief note in Geol. Centralbl., III, 118.

Beasley, Walter L. 1903 A
Evolution of the horse.
Scient. Amer., LXXXVIII, 451-452, 4 text-figs.

—— 1903 B
A remarkable fossil discovery.
Scient. Amer., LXXXIX, 87, 3 text-figs.
Abstract in Geol. Centralbl., IX, 400.

Beasley, Walter L.—Continued 1907 A
Naosaurus: A fossil wonder.
Scient. Amer., XCVI, 368, 6 text-figs.
A popular account of *Naosaurus*.

—— 1907 B
Diplodocus: The greatest of all earthly creatures.
Scient. Amer., XCVI, 491-492, 7 text-figs.
A popular account of *Diplodocus*, with a restoration, on page 485, by Charles R. Knight.

—— 1907 C
The greatest of mastodons.
Scient. Amer., XCVII, 103-104, 5 text-figs.

—— 1907 D
A carnivorous dinosaur: A reconstructed skeleton of a huge saurian.
Scient. Amer., XCVII, 446-447, 6 text-figs.

Beaumont, Élie 1872 A
Sur une dent d'*Elephas primigenius* trouvée dans l'Alaska.
C. R. Acad. Sci. Paris, LXXV, 1282.

Becker, George F. 1888 A
Pliocene and Post-pliocene strata at Clear Lake, Lake County, California.
Mon. U. S. Geol. Surv., XIII, 219-221.

—— 1891 A
Antiquities from under Tuolumne Table Mountain in California.
Bull. Geol. Soc. Amer., II, 189-198, pl. vii, 1 text-fig.

Beddard, Frank Evers 1888 B
On the classification of the *Striges*.
Ibis (5), VI, 335-344, 7 figs.

—— 1893 A
On certain points in the anatomy of parrots bearing on their classification.
Proc. Zool. Soc. Lond., 1893, 507-514, pl. xl.

—— 1896 A
On the anatomy of a grebe (*Æchmophorus major*) with remarks on the classification of some of the schizognathus birds.
Proc. Zool. Soc. Lond., 1896, 538-547, 7 figs.

—— 1897 B
Notes upon the anatomy of a manatee (*Manatus inunguis*).
Proc. Zool. Soc. Lond., 1897, 47-53, 6 figs.

—— 1898 A
The structure and classification of birds.
8vo., i-xx+1-548 pages, 252 text-figs.

Beddard, Frank Evers—Cont'd. 1899 A
On the brain of *Hydrochœrus.*
Proc. Zool. Soc. Lond., 1899, 798-803, 5 figs.

—— 1900 A
A book of whales.
8vo., i-xv+1-320 pages, 40 illustrations.

—— 1901 A
Contribution towards a knowledge of the osteology of the pigmy whale (*Neobalæna marginata*).
Trans. Zool. Soc. Lond., xvi, 87-114, pls. vii-ix.

—— 1902 A
Mammalia.
The Cambridge Natural History, 8vo., x, i-xii+1-605 pages, 285 text-figs.
Reviewed in Nature, lxvi, 373-375.

—— 1904 A
A note upon the tongue and windpipe of the American vultures, with remarks on the interrelations of the genera *Sarcorhamphus, Gypagus,* and *Cathartes.*
Proc. Zool. Soc. Lond., 1903, ii, 386-392, 4 text-figs.

—— 1904 B
"Abdominal ribs" in Lacertilia.
Nature, lxx, 6.

—— 1904 C
Preliminary note on certain points in the anatomy of *Eryx* and other Boidæ, partly indicative of their basal position among the Ophidia.
Ann. Mag. Nat. Hist. (7), xiii, 233-236.

—— 1905 A
The rudimentary hind limbs of the boine snakes.
Nature, lxxii, 630.

—— 1907 A
Contributions to the knowledge of the systematic arrangement and anatomy of certain genera and species of Squamata.
Proc. Zool. Soc. Lond., 1907, 35-68, text-figs. 10-19.

—— 1919 A
Further contributions to the anatomy of the sperm whale (*Physeter macrocephalus*) based upon an examination of two additional fœtus.
Ann. Durban Mus., ii, 129-148, pl. xxiii, 13 text-figs.

—— 1923 A
On the blow-holes and nasal passages of the cachalot.
Ann. Mag. Nat. Hist. (9), xi, 641-655.

Beddard, Frank Evers—Cont'd. 1923 B
Some observations upon the development of the teeth of *Physeter macrocephalus.*
Quart. Jour. Micr. Sci., lxvii, 1-32, 13 text-figs.
The bibliography presents 10 titles.

Bédé, P. 1921 A
Review of O. P. Hay's "Vertebrata mostly from stratum No. 3 at Vero, Florida," etc.
Rev. crit. Paléozool., xxv, 15.

Beebe, C. W. 1906 A
The bird: Its form and function.
8vo., i-xii+1-496 pages, over 300 illustrations.
Review in Nature, lxxvi, 1907, 489.

—— 1915 A
A tetrapteryx stage in the evolution of birds.
Ann. N. Y. Acad. Sci., xxvi, 447.

—— 1915 B
A tetrapteryx stage in the ancestry of birds.
Zoologica (N. Y. Zool. Soc.), ii, 39-52, figs. 7-11.

Beecher, Charles E. 1902 A
The reconstruction of a Cretaceous dinosaur, *Claosaurus annectens* Marsh.
Trans. Conn. Acad. Arts, Sci., xi, 311-324, pls. xli-xlv, 6 text-figs.
Abstracts in Geol. Centralbl., iv, 300; Rev. crit. Paléozool, vi, 177.

Beechey, Frederick William 1831 A
Narrative of a voyage to the Pacific and Beering's Strait, to cooperate with the polar expedition performed in his majesty's ship *Blossom,* under the command of Captain F. W. Beechey, R. N. [etc.], in the years 1825, '26, '27, '28. In two parts.
i-xxii+1-590 pages; followed by Buckland's description of fossils.

Beecker, Adolf 1903 A
Vergleichende Stilistik der Nasenregion bei den Sauriern, Vögeln und Säugethieren.
Morphol. Jahrb., xxxi, 565-619, pls. xxii-xxiv.
There is presented a bibliography of 28 titles.

Beede, J. W. 1907 A
Invertebrate paleontology of the Upper Permian Red Beds of Oklahoma and the Panhandle of Texas.
Kansas Univ. Sci. Bull., iv, 115-171.
This paper discusses the geological relations of the Permian in Texas.

Beede, J. W.—Continued 1922 A

Age and development of Red Beds and terrestrial vertebrates of the Appalachian and Kansan-Texas sections.

Bull. Geol. Soc. Amer., XXXIII, 671-688.

Beer, G. Rylands de 1922 A

The segmentation of the head in *Squalus acanthias*.

Quart. Jour. Micr. Sci. (n.s.), LXVI, 457-474, 13 figs.

The bibliography presents 19 titles.

—— 1924 A

The proötic somites of *Heterodontus* and of *Amia*.

Quart. Jour. Micr. Sci. (n.s.), LXVIII, 17-38, 16 figs.

There are listed 12 titles in the bibliography.

—— 1924 B

Contributions to the study of the development of the head in *Heterodontus*.

Quart. Jour. Micr. Sci. (n.s.), LXVIII, 39-65, 21 figs.

In the bibliography are listed 18 titles.

—— 1924 C

Studies on the vertebrate head. I: Fish.

Quart. Jour. Micr. Sci., LXVIII, 287-341, 42 figs.

The bibliographic list contains 33 titles.

—— 1925 A

Contributions to the development of the skull in the sturgeons.

Quart. Jour. Micr. Sci., LXIX, 671-687, 20 figs.

The bibliography records 12 titles.

—— 1926 A

Studies on the vertebrate head. II: The orbito-temporal region of the skull.

Quart. Jour. Micr. Sci., LXX, 263-370, 133 figs.

The bibliography occupies pages 367-370.

Behlen, H. 1906 A

Über das Milchgebiss der Paarhufer. I Teil: Literaturgeschichtliches.

Jahrb. Nassau. Ver. Naturk., LIX, 185-212.

A discussion of the principles advanced in the works of Rütimeyer, Kowalevsky, Schlosser, Pavlow, Scott, Zittel, Ameghino and Stehlin.

Abstracts in Geol. Centralbl., XII, 514; XIV, 338.

—— 1907 A

Über das Milchgebiss der Paarhufer; eine literaturgeschichtlich-vergleichende Studie in 2 Teilen. II Teil: Vergleichendes.

Jahrb. Nassau. Ver. Naturk., LX, 249-309.

Bell, R. 1897 A

Operations of the Geological Survey for the year 1895.

Summ. Rep. Geol. Surv. Canada for 1895 (1897); A, 1-154.

—— 1898 B

Mastodon and mammoth remains found near Hudson Bay.

Ottawa Naturalist, XI, 222-223.

An abstract of Bell, R., 1898 A.

Bell, Thomas 1841 A

Observations on the genus *Galictis* (Bell), with the description of a new species.

Trans. Zool. Soc. Lond. II, 201-206, pls. XXXV-XXXVII.

Bell, W. A. 1913 A

The Joggins Carboniferous section.

Can. Geol. Surv. Dept. Mines. Guide book No. 1, pt. ii, 326-346, with map.

Belling, D. E. 1912 A

Der Bau der vorderen paarigen Extremitäten und des Schultergürtels der *Trigla* im Zusammenhang mit dem Bau entsprechender Organe bei andern Teleostei.

Bull. Soc. Natural., Moscou (n.s.), XXV, 46-92, 3 text-figs.

Appended is a bibliography of 27 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 159.

Bemmelen, J. F. van. See **Van Bemmelen**, J. F.

Bender, Otto 1907 A

Die Homologie des Spritzloches der Selachier und der Paukenhöhlen der Amphibien, Sauropsiden und Säugetiere auf Grund ihrer Innervation.

Anat. Anz. Erganzungsh., XXX, 38-44.

—— 1910 A

Nochmals die Homologie der Paukenhöhlen.

Anat. Anz., XXXVII, 120-128.

—— 1911 A

Ueber Herkunft und Entwicke lung der columella auris bei *Testudo græca*.

Anat. Anz., XL., 161-177, 6 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 22.

Bender, Otto—Continued 1912 A

Ueber die Entwicklung des Visceralskelettes bei *Testudo græca.* I: Die Entwicklung des Kiefer- und des Zungenbeinbogens (*Columella auris*) und der Paukenhöhle.

Abh. Bayer. Akad., xv. Abh. 10, 1-62, pls. i-vii, 15 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 28-32.

—— 1913 A

Eine Antwort an H. Fuchs, Strassburg i. E., auf seine Polemik im Anat. Anz. Bd. 43, Nr. 2, 1913, S. 59-64.

Anat. Anz., xliii, 284-286.

Beneden, P. J. See **Van Beneden,** P. J.

Bennett, Frederick Debell 1836 A

Notes on the anatomy of the spermaceti whale.

Proc. Zool. Soc. Lond., iv, 127-129.

Abstract in Isis von Oken, 1838, 217-218.

—— 1837 A

On the natural history of the spermaceti whale.

Proc. Zool. Soc. Lond., v, 39-42.

—— 1840 A

The cachalot, or sperm whale (*Catodon macrocephalus* Lacep., *Physeter macrocephalus* Shaw).

Bennett's Narrative of a Whaling Voyage round the Globe, ii, 153-241, figure.

Contains an account of the anatomy and habits of the sperm whale.

Bensley, B. Arthur 1900 A

Abstract in Anat. Hefte, Ergebn., xiv, 1085.

—— 1901 A

Are the Australian Marsupialia of opossum derivation.

Science (n.s.), xiii, 431-433.

Reviewed in Science (n.s.), xiv, 331.

—— 1901 B

On the question of an arboreal ancestry of the Marsupialia, and the inter-relationships of the mammalian subclasses. A review of certain phases of present and past opinion.

Amer. Naturalist, xxxv, 117-138, 2 text-figs.

The bibliography presents 31 titles.

—— 1901 C

A theory of the origin and evolution of the Australian Marsupialia.

Amer. Naturalist, xxxv, 245-269, pls. i-iii.

There is appended a bibliography of 19 titles.

Bensley, B. Arthur—Continued 1902 A

On the identification of meckelian and mylohoid grooves in the jaws of Mesozoic and Recent Mammalia.

Stud. Univ. Toronto, Biol. Ser., No. 3, 1-9, with plate.

—— 1903 A

On the evolution of the Australian Marsupialia; with remarks on the relationships of the marsupials in general.

Trans. Linn. Soc. Lond. (2), ix, 83-217, pls. v-vii, 6 text-figs.

—— 1906 A

The homologies of the stylar cusps in the upper molars of the Didelphyidæ.

Stud. Univ. Toronto, Biol. Ser., No. 5, 1-13, 6 text-figs.

—— 1913 A

A *Cervalces* antler from the Toronto interglacial.

Stud. Univ. Toronto, Geol. Ser., No. 8, 1-3, 1 fig.

—— 1923 A

A musk-ox skull from the Iroquois beach deposits of Toronto: *Ovibos proximus* sp. nov.

Univ. Toronto Stud. Biol. Ser., No. 23, 1-11, 2 pls.

Berg, L. S. 1904 A

Zur Systematik der Acipenseriden.

Zool. Anz., xxvii, 665-667.

—— 1906 A

Uebersicht der Cataphracti. (Fam. Cottidæ, Cottocomephoridæ und Comephoridæ) des Baikalsees.

Zool. Anz., xxx, 906-911.

—— 1907 A

Die Cataphracti des Baikal-Sees (Fam. Cottidæ, Cottocomephoridæ und Comephoridæ).

Wiss. Ergebn. Zool. Exped. Baikal, 1900-1902, Lief, iii, i, ii+1-75 pages, pls. i-v, 15 text-figs.

Bergglas, Bernhard 1925 A

Zur Frage der Hyperdaktylie und des Os intermetarsale.

Zeitschr. Anat. Entwicklungsges., Abt. I, lxxv, 127-148, 8 figs.

The bibliography occupies pages 147-148.

Bergmann, Carl 1841 A

Zur Vergleichung des Unterschenkels mit dem Vorderarm.

Arch. Anat., Physiol. Leipzig, 1841, 201-205.

Berkey, Charles P. 1923 A
Proceratops andrewsi, a preceratopsian dinosaur from Mongolia.
Amer. Mus. Novit., No. 72, 1-9, 4 text-figs.

Bernstein, Heinricus A. 1853 A
De anatomia corvorum.
Dissertatio zootomica. Vratislaviæ. i-vi +1-61 pages, 2 pls.

Berrill, N. J. 1925 A
The development of the skull in the sole and the plaice.
Quart. Jour. Micr. Soc., LXIX, 217-244, 15 figs.
The bibliography presents 11 titles.

Berry, Edward W. 1916 A
Systematic paleontology [of Maryland]. Vertebrata.
Maryland Geol. Surv. Upper Cretaceous. 347-361, pls. viii, ix.
The bibliography of the species is presented.

—— 1917 A
The fossil plants from Vero, Florida.
Jour. Geol., XXV, 661-666.

—— 1917 B
The fossil plants from Vero, Florida.
Rep. Florida Geol. Surv., IX, 19-33.

—— 1917 C
A sailfish from the Virginia Miocene.
Amer. Jour. Sci. (4), XLIII, 461-464, 2 figs.
Abstract in Geol. Zentralbl., XXV, 44.

—— 1920 A
The evolution of the flowering plants and warm-blooded animals.
Amer. Jour. Sci. (4), XLIX, 207-211.

—— 1922 A
The geologic evidence of evolution.
Scient. Monthly, XV, 97-118, 5 figs.

—— 1925 A
The environment of the early vertebrates.
Amer. Naturalist, LIX, 354-362.

——, and W. K. **Gregory** 1906 A
Prorosmarus alleni, a new genus and species of walrus from the Upper Miocene of Yorktown, Virginia.
Amer. Jour. Sci. (4), XXI, 444-450, 4 text-figs.
Note in Knowl. Scient. News (n.s.), III, 509; Sci. Progress, I, 453.

Bertelli, D. 1909 A
I condotti ed i forami della mandibola nei mammiferi.
Arch. ital. Anat. Embr., VIII, 155-229, pls. xi-xiv.
The bibliography embraces 80 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 33-37.

Berthold, A. A. 1825 A
Ueber die Kopfknochen der Nagethiere.
Isis von Oken, 1825, 907-920, 983-1003, pl. viii.

Berthoud, E. L. 1872 A
Tusk of an elephant or mastodon found in Colorado.
Amer. Jour. Sci. (3), III, 302.
See Woodhull, A. A., 1872 B.

—— 1879 A
Prof. Marsh on the fossil polydactyle ancestors of the horse; and recent examples.
Kansas City Rev. Sci. Indust., III, 153-155.

—— 1881 A
The American horse.
Kansas City Rev. Sci., Indust., V, 414-415.
Also in Amer. Naturalist, XVII, 1883, 434-435.

Bertin, Léon 1921 A
La valeur des caractères spécifiques dans le genre *Gasterosteus* Linné.
Bull. Mus. hist. nat. Paris, 1921, 143-150.

—— 1921 B
Note préliminaire sur la notion d'espèce et la variabilité chez les épinoches.
C. R. Acad. Sci. Paris, CLXXII, 623-625.

Bertrand, C. Eg. 1903 A
Les coprolithes de Bernissart.
Mém. Mus. hist. nat. Belgique, I, 1-154, pls. i-xv.

—— 1904 A
Les coprolithes de Bernissart. Première partie: Les coprolithes qui out été attribués aux iguanodons.
Bull. Soc. belge Geol., XVIII, Proc. Verb., 121-122.

Bessels, Emil 1869 A
Ueber fossil Selachier-Eier.
Jahresh. Ver. Naturk. Wurttemb., XXV, 152-155, pl. iii.

Beyer, Hermann 1907 A
Studien über den sogenannten Schallleitungsapparat bei den Wirbeltieren und Betrachtungen über die Function des Schneckenfensters.
Arch. Ohrheilk., LXXI, 258-292, 7 figs.

Beyer, Hermann—Continued 1907 B
Studien über den sogenannten Schallleitungsapparat bei den Wirbeltieren und Betrachtungen über die Function des Schneckenfensters.
Arch. Ohrheilk., LXXII, 278-304, figs. 8-16.

—— 1908 A
Studien über den sogenannten Schallleitungsapparat bei den Wirbeltieren und Betrachtungen über die Function des Schneckenfensters.
Arch. Ohrheilk., LXXVII, 77-105, figs. 20-24.

—— 1909 A
Studien über den sogenannten Schallleitungsapparat bei den Wirbeltieren unter Betrachtungen über die Function des Schneckenfensters.
Arch. Ohrheilk., LXXVIII, 14-34.

Beyer, Samuel Walker 1899 A
Geology of Story County (Iowa).
Iowa Geol. Surv., IX, 1898 (1899), 157-237, map.

Beyrich, E. 1848 B
Ueber *Xenacanthus decheni* und *Holacanthus gracilis*, zwei Fische aus der Formation des Rothliegenden in Nord-Deutschland.
Arch. Min. Geogn. Bergb., XXII, 646-654.
Same as Beyrich, E., 1848 A.

Bibbins, Arthur B. 1905 A
The buried cypress forests of the upper Chesapeake.
Records of the Past, IV, 47-53, 3 figs.

—— 1907 A
Charles Willson Peale's painting "The exhuming of the first American mastodon."
Science (n.s.), XXV, 297.

—— 1908 A
Charles Willson Peale's painting, "The exhuming of the first American mastodon."
Bull. Geol. Soc. Amer., XVIII, 650-652, pl. lxxii.

——. See **Shattuck, Miller,** and **Bibbins.**

Bicknell, Edwin 1872 A
Sections of tooth of *Ceratodus.*
Proc. Bost. Soc. Nat. Hist., XIV, 189-190.

Biddulph, John 1885 A
On the geographical races of the Rocky Mountain bighorn.
Proc. Zool. Soc. Lond., 1885, 678-684.

Bigot, A. 1897 A
Les dinosauriens.
Rev. gén. Sci. Paris, VIII, 462-468, 12 text-figs.
A popular account of the dinosaurs, mostly derived from Marsh's Dinosaurs of North America.

Bild, A. 1902 A
Die Entwickelungsgeschichte des Zahnsystems bei *Sus domesticus* und das Verhältnis der Lippenfurchenanlage zur Zahnleiste.
Anat. Anz., XX, 401-410, 12 text-figs.
Published in 1901 as an inaugural dissertation at Breslau.

Billings, Elkanah 1856 A
On the Tertiary rocks of Canada, with some account of their fossils.
Canad. Natural., Geol., I, 321-346.
Discusses the "glacial drift."

—— 1856 B
On the mammoth and the mastodon.
Canad. Natural., Geol., I, 379-390, 2 pls.

—— 1863 B
On the remains of fossil elephants found in Canada.
Geologist, VI, 475-478.

—— 1869 A
Note on the bones of a mastodon found near Dunnville, Oct., 1868.
Geol. Mag., VI, 38-40.

—— 1870 A
On the bones of a whale lately discovered at Cornwall, Ontario.
Canad. Natural., Quart. Jour. Sci. (n.s.), V, 438-439.

Binney, Edward W. 1879 A
On a giant tooth of a fossil shark.
Mem. Manchester Soc., XVIII, 118.

Birula, A. A. 1910 A
Contributions à la classification et à la distribution géographique des mammifères.
Annuaire Mus. St. Pétersb., XV, 318-333.
The title and the text are in Russian.

—— 1913 A
Contributions à la classification et la distribution géographique des mammifères. III: Carnivores recueillis dans la Perse par Mr. N. A. Zaroudny en 1896, 1898, 1900-1902, et 1903-1904.
Annuaire Mus. St. Pétersb., XVII, 219-280, pls. viii-x.
Printed in Russian.

Bischoff, T. L. W. 1840 B
Description anatomique du *Lepidosiren paradoxa*.
Ann. Sci. nat. (2), XIV, 116-159, pls. vi-x.
This is a French translation of Bischoff, T. L. W., 1840 A. See also Froriep's Notizen, XVI, cols. 141-148.

Bishop, Sherman C. 1921 A
Remains of a fossil phocid from Plattsburgh, New York.
Jour. Mamm., II, 170.

Bittner, F. 1912 A
Über die Schläfenregion am Schädel der Vögel und dessen Beziehungen zu dem der Reptilien.
Arch. Naturges., LXXVIII, Abt. A, Heft 6, 1-23, pl. i.
Appended is a bibliography consisting of 48 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 33-35.

Bizot, —— 1912 A
Le rapport brachio-antibrachial chez les cheiroptères.
C. R. Acad. Sci. Paris, CLIV, 131-133.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 160.

Black, Davidson 1915 A
A study of the endocranial casts of *Ocapia*, *Giraffa*, and *Samotherium*, with special reference to the convolutional pattern in the family of Giraffidæ.
Jour. Comp. Neur., XXV, 329-357, 25 figs.
The bibliography records 29 titles.

—— 1920 A
On the endocranial anatomy of *Oreodon* (*Merycoidodon*).
Jour. Comp. Neur., XXXII, 271-314, pls. i-vi, 26 text-figs.
There is a bibliography of 30 titles.

—— 1925 A
Asia and the dispersal of Primates.
Bull. Geol. Soc. China, IV, No. 2, 133-183, 1 table.
Appended is a bibliography of 55 titles.
Review in Amer. Jour. Sci. (5), XII, 459.

Black, Norman 1900 A
Adaptive modification as seen in the teeth of Mammalia.
Brit. Jour. Dental Sci., XLIII, 4-23.
Abstract in Deutsche Monatsschr. Zahnheilk., XVIII, 229-231.

Blainville, H. M. D. 1817 A
Mémoire sur l'opercule des poissons.
Bull. Soc. Philom. Paris, 1817, 104-109.
See also Isis von Oken, II, 1818, 1412-1419.

Blainville, H. M. D.—Continued 1819 A
Sur un nouveau caractère ostéologique servant à distinguer les animaux quadrupèdes ongulés en deux sections.
Bull. Soc. Philom. Paris, 1819, 41.

—— 1821 A
Mémoire sur l'emploi de la forme du sternum et de ses annexes, pour l'établissement ou la confirmation des familles naturelles parmi les oiseaux.
Jour. Phys. Chim. Hist. nat., XCII, 185-216.

—— 1835 A
Description de quelques espèces de reptiles de la Californie, précédée de l'analyse d'un systeme général d'erpétologie et d'amphibiologie.
Nouv. Ann. Mus. hist. nat. Paris, IV, 233-296, pls. xxiv-xxvii.

—— 1838 A
Recherches sur l'ancienneté des chéiroptères ou de la famille des chauvesouris à la surface de la terre, précédées de l'histoire de la science à leur sujet, des principes de leur classification et de leur distribution géographique actuelle.
Ann. Sci. nat., (2), IX, 357-366.

—— 1839 A
See Hay, O. P., 1902 A, p. 26.
Abstract in Neues Jahrb. Min. Geogn. Geol., 1840, 117-125.

—— 1839 D
New doubts relating to the supposed *Didelphis* of Stonesfield.
Mag. Nat. Hist., III, 1-10.
Translated from C. R. Acad. Sci. Paris, 1838, 572.

Blake, Charles C. 1861 A
On the distribution of mastodon in South America.
Geologist, IV, 469-472.
Seems to contain earliest notice of *Elephas texianus*.

—— 1862 C
Shark's teeth at Panama.
Geologist, V, 316-317.

—— 1863 A
On the geological evidences of horses in the New World.
Geologist, VI, 24-28.

—— 1863 B
Elephas texianus v. *columbi*.
Geologist, VI, 56-60, 1 text-fig.
This paper is wrongly recorded in Hay, O. P., 1902 A, p. 27, under date of 1862.

Blake, J. F. 1905 A
A monograph of the fauna of the Cornbrash.
Palæont. Soc. Mon. for 1907, 1-106, pls. i-ix.
It is stated in this publication that pages 1-100 and the plates were published in 1905.

Blake, James Henry 1873 A
The fossil tooth of a species of shark which was found near Martinez.
Proc. Calif. Acad. v, 172.

—— 1874 A
Exhibition of fossil teeth.
Proc. Calif. Acad. Sci. (1), v, 270.

Blake, William P. 1856 A
Observations on the physical geography and geology of the coast of California, from Bodega Bay to San Diego.
U. S. Coast Surv. Rep. 1855 (U. S. 34th Congr., 1st session. Sen. Exec. Doc. 22, 376-398).
Also as a separate of, 1-23.

—— 1857 A
Itinerary, or notes and general observations upon the geology of the route.
Report of explorations and surveys for a railroad route from the Mississippi River to the Pacific Ocean, vol. v, 1-310, with maps and figs.

—— 1866 A
New locality of fossils in gold-bearing rocks of California.
Proc. Calif. Acad. Sci., III, 289-291.

—— 1867 B
Fossil fish in the Great Basin, Nevada.
Proc. Calif. Acad. Sci., III, 306.

—— 1867 C
Tooth of mastodon.
Proc. Calif. Acad. Sci., III, 291.

—— 1884 A
The Carson City ichnolites.
Science (1), IV, 273-276, 4 figs. Has references to 5 papers.

—— 1899 A
The Pliocene skull of California and the flint implements of Table Mountain.
Jour. Geol., VII, 631-637.

—— 1908 A
Geological sketch of the region of Tucson, Arizona.
Carnegie Instn. Wash. Pub. No. 99, 45-68, pls. xlix-lii.

Blanchard, E. 1861 A
Le système tégumentaire des reptiles.
Ann. Sci. nat. (4), XV, 375-381.

Blanford, W. T. 1876 A
The African element in the fauna of India; a criticism of Mr. Wallace's views.
Ann. Mag. Nat. Hist. (4), XVIII, 277-294.

—— 1901 A
Direction of spirals in horns.
Nature, LXIII, 298.

Blasius, Wilhelm 1884 B
Ueber Vogel-Brustbeine.
Jour. Ornith., XXXII, 228-229.

—— 1885 A
Neue Thatsachen in Betreff des Aussterbens von *Alca impennis* L. (nach brieflichen Mittheilungen von A. Newton und W. Preyer).
Jour. Ornith., XXXIII, 398-399.

—— 1885 B
Osteologische Studien (Messungs-Methoden an Vögel-Skeletten).
Jour. Ornith., XXXIII, [(4) xii], 409-415.

—— 1900 A
Der Riesen-Alk, *Alca impennis* L. oder *Plautus impennis* (L), in der ornitholigischen Litteratur der letzten fünfzehn Jahre.
Ornith. Monatsschr., Magdeburg, 434-446, pls. xxvii, xxviii.
Abstract in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 137.

Blatchley, Willis Stanley 1902 A
A nature wooing at Ormond by the Sea.
Pages 1-245, 12 plates, 1 map, 63 text-figs.

Blatschke, Friedrich 1904 A
Über die tiergeographische Bedeutung eines antarktischen Kontinents.
Verh. zool.-bot. Ges. Wien, LIV, 144-155.

Blendinger, W. 1904 A
Das Cribrum der Säugetiere.
Morphol. Jahrb., XXXII, 452-478, pls. xi, xii, 6 text-figs.

Bliss, Richard 1875 A
Some peculiarities in the structure of the fin spines of certain groups of fishes.
Proc. Bost. Soc. Nat. Hist., XVII, 386.
The groups considered are the siluroids and the doradoids.

Bloch, L. 1916 A

Schwimmblase und die vier vordersten Wirbel bei *Cobitis tænia* L.

Vierteljahrschr. Naturf. Ges. Zurich, LXI, 136-148, pls. v, vi.

Blumenbach, J. F. 1803 A

Das *Mammut-Ohioticum* nun wirklich in London.

Voigt's Mag. Naturk., v, pp. 1-7.

Bluntschli, H. 1911 A

Das Platyrrhinengebiss und die Bolksche Hypothese von der Stammesgeschichte des Primatengebisses.

Anat. Anz. Ergänzungsh., XXXVIII, 120-136, 8 text-figs.

—— 1912 A

Beziehungen zwischen Form und Funktion der Primatenwirbelsäule.

Morphol. Jahrb., XLIV, 489-515, pl. xi, 9 text-figs.

—— 1912 B

Zur Phylogenie des Gebisses der Primaten mit Ausblicken auf jene Säugetiere überhaupt.

Vierteljahrsschr. naturf. Ges. Zurich, LVI, 350-392, 21 text-figs.

Appended is a bibliography of 33 titles.

—— 1913 A

Die fossilen Affen Patagoniens und der Ursprung der platyrrhinen affen.

Anat. Anz., Ergänzungsh., XLIV, 33-43.

—— 1913 B

Ueber probleme der Gebissentwicklung.

Anat. Anz., Ergänzungsh., XLIV, 195.

Boas, J. E. V. 1884 B

Ein Beitrag zur Morphologie der Nägel, Krallen, Hufe und Klauen der Säugethiere.

Morphol. Jahrb., IX, 389-400, pl. xviii.

—— 1890 B

Ein Fall von vollständiger Ausbildung des 2. und 5. Metacarpale beim Rind.

Morphol. Jahrb., XVI, 530-533, 2 figs.

—— 1908 A

Bemaerkninger ved Forelaeggelsen af første Del af Boas & Paulli "*The Elephant's Head.*"

Vid. Medd. nat. For. Kjobenh., 1908, 197-211, pls. i, ii.

Boas, J. E. V.—Continued 1909 A

Der Fuss der Carnivoren.

Zool. Anz., XXXIV, 524-538, 15 text-figs.

See also the same author's paper entitled Nogle Vemaerkninger om Rovdyrenes Fod, in, Vid. Medd. nat. For. Kjobenh., 1909, 181-184.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 134.

—— 1910 A

Die Fusssohlen der Hasen.

Zool. Anz., XXXV, 439-445, 5 text-figs.

—— 1914 A

Der Gehörgang und der Ohrknorpel von *Balænoptera rostrata.*

Zool. Anz., XLIV, 380-381.

—— 1914 B

Phylogenie der Wirbeltiere.

Hertwig and Wettstein's Abstammungslehre: Systematik, Palaeontologie, Biogeographie.

Pages 530-605, figs. 1-47.

The bibliography records 50 titles.

—— 1914 C

Die Schlafenüberdachung und das Palatoquadratum in ihrem Verhältnis zum übrigen Schädel bei den Dipnoern und den terrestren Wirbeltieren.

Morphol. Jahrb., XLIX, 229-307, 100 text-figs.

—— 1917 A

Das Gehörn von *Antilocapra* und sein Verhältnis zu den anderen Cavicornia und der Hirsche.

Danske Vidensk. Selsk. Biol. Medd., I, 2, 1-23, pls. i, ii, 4 text-figs.

—— 1918 A

Zur Kenntnis des Hinterfusses der Marsupialier.

Danske Vidensk, Selsk. Biol. Medd., I, 8, 1-24, pls. i, ii.

Böcking, Adolph 1865 A

Ueber *Hydrochœrus capybara.*

Arch. Naturges., XXX, I, 32-40.

Abstract in Zeitschr. gesammt. Naturw., XXV, 1865, p. 302.

Böker, Hans 1913 A

Der Schädel von *Salmo salar*: Ein Beitrag zur Entwickelung des Teleostierschädels.

Anat. Hefte, XLIX, Abth. I, 359-397, pls. xxiv-xxvii, 10 text-figs.

The bibliography presents 16 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 42.

Böker, Hans—Continued 1927 A

Die Entstehung der Wirbeltiertypen und der Ursprung der Extremitäten.

Zeitschr. Morphol. Anthrop., xxvi, 1-58, 3 tables.

The bibliography presents 71 titles.

Böklen, Hermann 1887 A

Die Gattung *Ceratodus.*

Jahresb. Ver. Naturk. Württemb., xliii, 76-81.

Boenninghaus, Georg 1904 A

Das Ohr des Zahnwales, zugleich ein Beitrag zur Theorie der Schalleitung. Eine biologische Studie.

Zool. Jahrb. Anat., xix, 189-360, pls. xii, xiii, 23 text-figs.

There is an extensive bibliography.

Böse, Emilio 1905 A

Reseña acerca de la geológia de Chiapas y Tabasco.

Bol. Inst. Geol. Mex., xx, 1-116, 9 pls.

Boettger, Oskar 1877 A

Ueber das kleine *Anthracotherium* aus der Braunkohle von Rott bei Bonn.

Palaeontogr., xxiv, 163-173, 7 text-figs.

Bogoljubsky, S. 1914 A

Brustbein- und Schultergürtelentwicklung bei einigen Lacertilien.

Zeitschr. wiss. Zool., cx, 620-666, pls. xvii-xxi.

Appended is a list of 17 papers on the subject.

Bogolubow, N. N. 1909 A

Sur quelques restes de deux reptiles (*Cryptoclidus simbirskensis* n. sp. et *Ichthyosaurus steleodon* n. sp.), trouvés par M. le Profes. A. P. Pavlow sur les bords de la Volga dans les couches mésozoiques de Simbirsk.

Annuaire Geol. Min. Russie, xi, 42-64, pl. ii, 2 text-figs.

—— 1910 A

Sur les restes des mosasauriens trouvés dans le gouvernment d'Orenbourg.

Annuaire Geol. Min. Russie, xii, 8-14, pl. i.

This paper is printed in Russian, with a brief abstract in French.

—— 1912 A

Sur la présence de l'*Elasmosaurus* et du *Polycotylus* dans les dépôts de la Russie.

Annuaire Geol. Min. Russie, xiv, 174-176, 2 text-figs.

Printed in Russian.

Boie, Frederick 1826 A

Generalübersicht der ornithologischen Familien und Gattungen.

Isis von Oken, xix, cols. 969-981.

Bojanus, Ludwig Heinrich 1818 A

Versuch einer Deutung der Knochen im Kopfe der Fische.

Isis von Oken, ii, cols. 498-510, pl. vii.

—— 1818 B

Bemerkungen in Bezug auf die Deutung der Kopfknochen im Fische.

Isis von Oken, ii, cols. 2095-2096.

—— 1819 A

Weiterer Beytrag zur Deutung der Schädel-Knochen.

Isis von Oken, v, cols. 1360-1368, pl. xvi.

—— 1821 A

Abermals ein Wort zur Deutung der Kopfknochen.

Isis von Oken, ix, cols. 1145-1167.

—— 1824 A

De *Merycotherii sibirici,* gigantei animalis ruminantis antediluviano quodam, dentibus incerto Siberiæ loco erutis, declarato vestigio commentatio.

Nova Acta Acad. Leop. Carol., xii, 263-278, pls. xxi, xxii.

—— 1824 B

Craniorum *Argalidis. Ovis* et *Capræ* domesticæ comparatio.

Nova Acta Acad. Leop. Carol., xii, 293-300, pls. xxiv, xxv.

—— 1824 C

Adversaria, ad dentitionem equini generis et ovis domesticæ spectantia.

Nova Acta Acad. Leop. Carol., xii, 697-708, pls. lviii, lix.

Bolk, Louis 1906 A

Beiträge zur Affenanatomie. V: Die Differenzirung des Primatengebisses.

Bijdr. Anat. Haarlem, iv, 103-114.

—— 1909 A

On the position and displacement of the foramen magnum in the Primates.

Proc. Akad. Wet. Amsterdam, xii, 362-377, 5 text-figs.

This paper appeared also in the Verslag of the same Society, xviii, 1910, 62-78.

—— 1910 A

Über die Phylogenese des Primatengebisses und das Zukunftsgebiss des Menschen.

Zeitschr. Morphol. Anthrop., xiii, 31-56, pl. i, 6 text-figs.

Bolk, Louis—Continued 1910 B

Über die Phylogenese des Primatengebisses und das Zukunftsgebiss des Menschen (Nachtrag).

Zeitschr. Morphol. Anthrop., XIII, 343-346, 2 text-figs.

—— 1910 C

On the slope of the foramen magnum in Primates.

Proc. Akad. Wet. Amsterdam, XII, 525-534, 4 text-figs.

This paper appeared also in the Verslag of the same Society, XVIII, 551-560.

—— 1911 A

Über die Gaumenentwicklung und die Bedeutung der oberen Zahnleiste beim Menschen.

Zeitschr. Morphol. Anthrop., XIV, 241-304, pl. xxiv, 57 text-figs.

—— 1912 A

Ueber die Struktur des Reptiliengebisses und die Beziehung desselben zum Säugergebiss.

Anat. Anz., Ergänzungsh., XLI, 58-68.

—— 1912 B

On the structure of the dental system of reptiles.

Proc. Acad. Wet. Amsterdam, XIV, 950-961, pl. ii, 8 text-figs.

—— 1913 A

Die Ontogenie der Primatenzähne. Versuch einer Lösung der Gebissprobleme.

Jena, 8vo., i-v+1-122 pages, pls. i, ii, 74 text-figs.

Reviewed in Naturwissenschaften, Berlin, I, 1913, 869-870; Nature, XCI, 326.

—— 1914 A

Die Morphogenie der Primatenzähne. Eine weitere Begrundung und Ausarbeitung der Dimertheorie.

Jena, 8vo., i-viii+1-181 pages, double plates i-iii, 61 text-figs.

—— 1915 A

Welcher Gebissreihe gehören die Molaren an?

Zeitschr. Morphol. Anthrop., XVII, 83-116, pl. ix, 7 text-figs.

—— 1915 B

Über Lagerung, Verschiebung und Neigung des Foramen magnum am Schädel der Primaten.

Zeitschr. Morphol. Anthrop., XVII, 611-694, pl. xxiii, 31 text-figs.

Bolk, Louis—Continued 1915 C

On the metamerological signification of the craniovertebral interval.

Proc. Akad. Wet. Amsterdam, XVIII, 191-201, 3 figs.

—— 1916 A

On the relation between the dentition of marsupials and that of reptiles and monodelphians.

Proc. Akad. Wet. Amsterdam, XVIII, 715-737, 9 figs.

—— 1921 A

Die verschiedenen Formen des Condylus tertius und ihre Entstehungsursache.

Anat. Anz., LIV, 335-347.

—— 1921 B

On the development of the palate and alveolar ridge in man.

Jour. Anat. Lond., LV, 138-186, 76 figs.

—— 1921 C

On the tooth-glands in reptiles and their rudiments in mammals.

Jour. Anat. Lond., LV, 219-234, figs. 77-96.

—— 1922 A

On the relation between reptilian and mammalian teeth.

Jour. Anat. Lond., LVI, 107-136, figs. 97-107.

—— 1922 B

On the relation between reptilian and mammalian dentition.

Jour. Anat. Lond., LVII, 55-75, figs. 108-123.

—— 1923 A

On the significance of the supraorbital ridges in the Primates.

Proc. Akad. Wet. Amsterdam, XXV, 16-21, 5 figs.

—— 1923 B

The problem of orthognathism.

Proc. Akad. Wet. Amsterdam, XXV, 371-381, 12 figs.

Bolton, H. Carrington 1888 A

Notes on the great salt deposit of Petite Anse, Louisiana.

Trans. N. Y. Acad. Sci., VII, 122-127.

Bolton, Herbert 1896 A

On the occurrence of the genus *Listracanthus* in the English Coal measures.

Geol. Mag. (4), III, 424-426, 1 fig.

Bonaparte, Carlo Luciano 1831 A

Saggio di una distribuzione metodica degli animali vertebrati.

Roma, 1831, 8vo., 1-144 pages. A reprint with continuous pagination.

Originally published in Gior. Arcadico Sci., XLIX, 1831, 3-77; LII, 1831, 129-209. Published also in Isis von Oken, 1833, col. 1183-1229.

—— 1832 A

Versuch einer methodischen Eintheilung der Wirbelthiere.

Isis von Oken, XXV, cols. 283-320.

Translated from the Italian of Giornale arcadico di scienze, lettere ed arti, XLIX, 1831.

—— 1833 A

Bemerkungen über die zweite Ausgabe von Cuvier's Thierreich.

Isis von Oken, 1833, cols. 1041-1099.

A review and criticism of Cuvier's work.

—— 1833 B

Versuch einer methodischen Vertheilung der Wirbelthiere mit kaltem Blut.

Isis von Oken, 1833, cols. 1183-1217.

Translated from the Italian work of 1832.

—— 1836 A

Cheloniorum tabula analytica.

8vo., 1-9 pages.

"Dabam Romæ prid. Id. Majas MDCCCXXXVI." (C. L. B.).

—— 1838 A

Cheloniorum tabula analytica.

Arch. Naturges., IV, I, 136-142.

See also Jardine, Mag. Zool. Bot., II, 1838, 58-63; Isis von Oken, 1841, 621-638.

—— 1838 B

Synopsis vertebrorum systematis.

Ann. Sci. nat., Bologna, II, 105-133.

See also Isis von Oken, 1839, cols. 848-861; C. R. Soc. Paris, VII, 1838, 656-658 Trans. Linn. Soc. Lond., XVIII, 1841, 247-304.

—— 1838 C

Selachorum tabula analytica.

Ann. Sci. nat., Bologna, II, 195-214.

—— 1839 A

Selachorum tabula analytica.

4to., pages 1-16.

Originally published in Mém. Soc. Sci. Nat. Neuchâtel, Tom. ii. The citations are made from the reprint.

—— 1840 A

Systema vertebratorum.

Trans. Linn. Soc. Lond., XVIII, 1841, 247-304.

Published also separately with pages 1-58.

This work is quoted in L. Agassiz's Nomenclator Zoologicus as dating from 1837.

Bonhote, J. Lewis 1905 A

On the mouse-hares of the genus *Ochotona.*

Proc. Zool. Soc. Lond., 1904, II, 205-220.

Bonsdorff, E. J. 1871 A

Kritik der allgemein angenommenen Deutung der Furcula bei den Vögeln.

Acta Soc. Sci. Fenn., IX, 297-326, pls. i-iv.

The literature examined is cited in footnotes.

Bordage, Edmond 1892 A

Les vertébrés descendent-ils des arthropodes?

Rev. Scient. Paris, XLIX, 333-339, 8 text-figs.

Borden, William W. 1874 A

Report of a geological survey of Clarke and Floyd Counties, Indiana.

Geol. Surv. Ind., Ann. Rep., V, 134-189.

Born, G. 1827 A

Bemerkungen über den Zahnbau der Fische.

Zeitschr. organ. Physik., I, 182-206.

Bose, P. N. 1880 A

Undescribed fossil Carnivora from the Sivalik Hills in the collection of the British Museum.

Quart. Jour. Geol. Soc., XXXVI, 110-136, pl. vi.

Botez, Ioan G. 1921 A

Sur quelques tortues éocènes du genre *Ocadia.*

Bull. Soc. geol. France (4), XXI, 80-86, pls. iv, v.

Botezat, E. 1903 A

Gestaltung und Klassification der Geweihe des Edelhirsches, nebst einem Anhange über die Stärke der Karpathenhirsche und die zwei Rassen derselben.

Morphol. Jahrb., XXXII, 104-158, pl. iv, 1 text-fig.

The bibliography presents 10 titles.

—— 1904 A

Untersuchung über die Hyperplasie an Rehgeweihen mit Berücksichtigung der übrigen Cerviden.

Arch. Entwickl.-mech. Organ., XVIII, 593-607, pl. xxxvi.

Botti, Ulderigo 1877 A

Sopra una nuova specie di *Myliobates.*

Atti Soc. Toscana Sci. Nat., III, 371-382, 1 fig.

Contains list of species then known.

Botti, Ulderigo—Continued 1901 A

Sui molari di elefante.

Boll. Soc. geol. Ital., XX, 438-444.

Boule, Marcellin 1891 A

Les grands animaux fossiles de l'Amerique.

8vo., Paris, 1-45, 14 figs. Reprint from Revue Scientifique.

—— 1902 A

Revision des espèces européennes de *Machairodus*.

Bull. Soc. géol. France (4), I, 551-573, 17 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 345-346; Geol. Centralbl., III, 116; Rev. crit. Paléozool., VI, 101.

—— 1902 B

Les créatures géantes d'autrefois.

Rev. gen. Sci., Paris, XIII, 903-915, 30 text-figs.

Brief notices in Geol. Centralbl., IV, 56; Rev. crit. Paléozool., VII, 11.

—— 1905 A

Sur l'évolution des mammifères fossiles.

C. R. Acad. Sci., Paris, CXL, 1662-1664.

Abstract in Geol. Centralbl., VII, 492; IX, 726.

—— 1906 A

Les grands chats des cavernes.

Ann. Paléont. Paris, I, 69-95, 4 plates, 12 text-figs.

Abstracts in Geol. Centralbl., VIII, 30; Geol. Mag. (5), III, 270.

—— 1910 A

Les chevaux fossiles des grottes de Grimaldi et observations générales sur les chevaux quaternaires.

Ann. Paléont. Paris, VI, 1-23, 7 text-figs.

An extract from a memoir published by the Prince of Monaco on the grottos of Grimaldi.

Abstract in Sci. Progress, V, 671-672.

—— 1913 A

Un cadavre de mammouth sibérien au Muséum [d'Histoire Naturelle, Paris].

L'Anthrop. Paris, XXIV, 116-117.

—— 1918 A

Sur l'attribution de la médaille Albert Gaudry a M. Henry Fairfield Osborn.

Bull. Soc. géol. France (4), XVIII, C. R. sommaire, 88-92.

Boule, Marcellin—Continued 1923 A

Fossil men. Elements of human palæontology.

Translated from the French edition of 1923. 8vo., I-XXVIII+1-504 pages, 248 illustrations.

Citations of the literature in foot-notes.

——, and A. **Thevenin** 1920 A

Mammifères fossiles de Tajira.

Miss. Sci. Crequi-Montfort et E. S. de la Grange. 4to., 1-255, pls. i-xxvii, 65 text-figs. Paris. Imprimerie nationale.

Reviews in Rev. crit. Paléozool., XXVII, 81; Nature, CXI, 699.

Abstract in Geol. Zentralbl., XXVIII, 281, 445.

Boulenger, G. A. 1885 B

Remarks on the geographical distribution of the Lacertilia.

Ann. Mag. Nat. Hist. (5), XVI, 77-85.

—— 1888 B

On the presence of ossa transversa in a chelonian.

Ann. Mag. Nat. Hist. (6), I, 452-453, 1 fig.

See, however, II, 122.

—— 1890 A

On the distinctive cranial characters of the iguanoid lizards allied to *Iguana*.

Ann. Mag. Nat. Hist. (6), VI, 412-414.

—— 1891 A

Abstract in Geol. Mag. (3), VIII, 381-382.

—— 1891 C

On a humerus of *Eosphargis gigas* Owen from the London Clay of the Isle of Sheppey, Kent.

Proc. Zool. Soc. Lond., 1891, 7-8, fig. 6.

—— 1891 D

Notes on the osteology of *Heloderma horridum* and *H. suspectum*, with remarks on the systematic position of the Helodermatidæ and on the vertebræ of the Lacertilia.

Proc. Zool. Soc. Lond., 1891, 109-118, 6 figs.

—— 1893 B

On some newly-described Jurassic and Cretaceous lizards and rhynchocephalians.

Ann. Mag. Nat. Hist. (6), XI, 204-210.

—— 1893 C

Note on the variations of the lateral shields in the three-spined stickleback (*Gasterosteus aculeatus*).

Ann. Mag. Nat. Hist. (6), XI, 228-229.

Boulenger, G. A.—Continued 1895 B

Remarks on some cranial characters of the salmonoids.

Proc. Zool. Soc. Lond., 1895, 299-302, 1 text-fig.

—— 1895 C

Catalogue of the perciform fishes of the British Museum.

Vol. I, Containing the Centrarchidæ, Percidæ and Serranidæ (part). 8vo., London, i-xix+1-394 pages, pls. i-xv, 27 text figs.

—— 1895 D

On the American box-tortoises.

Ann. Mag. Nat. Hist. (6), xv, 330-331.

—— 1901 A

Notes on the classification of teleostean fishes. I: On the Trachinidæ and their allies.

Ann. Mag. Nat. Hist. (7), VIII, 261-271, 1 text-fig.

Reviewed by D. S. Jordan in Amer. Naturalist, 1902, XXXVI, 160-162.

—— 1901 B

Batrachians and reptiles in "The Cambridge Natural History."

Nature, LXIV, 401-403, 2 text-figs.

A review of volume 8 of the Cambridge Natural History on Amphibia and Reptiles, by Hans Gadow.

—— 1901 C

On the genera of Osteoglossidæ.

Ann. Mag. Nat. Hist. (7), VIII, 514-515.

—— 1901 D

Les poissons du bassin du Congo.

8vo., i-lxii+1-532 pages, map, 25 pls., many text-figs.

Publ. de l'Etat Indépendant du Congo.

—— 1902 A

Notes on the classification of teleostean fishes. III: On the systematic position of the genus *Lampris*, and on the limits and contents of the suborder Catosteomi.

Ann. Mag. Nat. Hist. (7), X, 147-152, 1 text-fig.

—— 1902 B

Notes on the classification of teleostean fishes. IV: On the systematic position of the Pleuronectidæ.

Ann. Mag. Nat. Hist. (7), X, 295-304.

—— 1902 C

Fossil fishes in the British Museum.

Nature, LXV, 388-389.

A review of part IV of A. S. Woodward's "Catalogue of Fossil Fishes in the British Museum."

Boulenger, G. A.—Continued 1902 D

On the southern snapping-turtle (*Chelydra rossignonii* Bocourt).

Ann. Mag. Nat. Hist. (7), IX, 49-51.

—— 1902 E

Notes on the classification of teleostean fishes. II: On the Berycidæ.

Ann. Mag. Nat. Hist. (7), IX, 197-204.

—— 1902 F

Amphibia.

Encyclop. Brit., ed. 10, XXV, 381-384, 5 text-figs.

—— 1903 A

On reptilian remains from the Trias of Elgin.

Geol. Mag. (4), X, 355-357, 2 text-figs.

Abstracts in Rev. crit. Paléozool., VII, 191-193; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 156-157.

—— 1904 A

A synopsis of the suborders and families of teleostean fishes.

Ann. Mag. Nat. Hist. (7), XIII, 161-190.

For a German translation of this paper see Arch. Naturges., LXX, Bd. I, 197-228. Review in Amer. Naturalist, XXXVIII, 597-599.

—— 1904 B

A remarkable ichthyosaurian right anterior paddle.

Proc. Zool. Soc. Lond., 1904, I, 424-426, text-fig. 83.

On the reprints of this paper the title is: "A new species of ichthyosaur from Bath."

—— 1904 C

On the characters and affinities of the Triassic reptile *Telerpeton elginense*.

Proc. Zool. Soc. Lond., 1904, I, 470-481, pls. xxx-xxxii, 1 text-fig.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, 139-140; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 166; and in Geol. Centralbl., VII, 497.

—— 1904 D

Teleosti (Systematic part).

The Cambridge Natural History, VII, 539-727, text-figs. 325-440.

For reviews see Science (2), XXI, 653-661; Amer. Naturalist, XXXIX, 339-340; Nature, LXXII, 103-105.

—— 1917 A

Sur l'évolution de l'appareil à venin des serpents.

C. R. Acad. Sci. Paris, CLXV, 92-94.

—— 1917 B

Sur certain catégories à établir parmi les poissons habitant les eaux douces.

C. R. Acad. Sci. Paris, CLXV, 327-330.

Boulenger, G. A.—Continued 1917 C
Considerations sur les reptiles permo-triasiques de l'order des cotylosauriens.
C. R. Acad. Sci. Paris, CLXV, 456-459.

—— 1917 D
Sur l'origine marine du genre *Salmo*.
C. R. Acad. Sci. Paris, CLXV, 1041-1045.

—— 1917 E
On the use of the names Plesiosauria and Sauropterygia.
Proc. Zool. Soc. Lond., 1917, 221-222.

—— 1918 A
Head of *Hydrocyon goliath*.
Proc. Zool. Soc. Lond., 1918, 195.

—— 1918 B
Le plus ancien poisson characinide, sa signification au point de vue de la distribution actuelle de cette famille.
C. R. Acad. Sci. Paris, CLXVI, 197-200.

—— 1918 C
Considérations sur les affinités et la dispersion géographiques des lacertides.
C. R. Acad. Sci., Paris, CLXVI, 594-598.

—— 1918 D
Les lézards hélodermatides de l'Éocène supérieur de la France.
C. R. Acad. Sci. Paris, CLXVI, 889-893.

—— 1918 E
Sur la place des chéloniens dans la classification.
C. R. Acad. Sci. Paris, CLXVII, 514-518.

—— 1919 A
L'évolution est-elle réversible? Considérations au sujet de certains poissons.
C. R. Acad. Sci. Paris, CLXVIII, 41-44.

—— 1920 A
Synopsis of the American species of *Rana*.
Ann. Mag. Nat. Hist. (9), III, 408-416.

—— See **Cunningham** and **Boulenger**.

Bouvier, L. E. 1889 A
Faut-il associer les zeuglodontes aux cétacés?
C. R. Congr. internat. Zool., I, Paris, 1889, 232.

—— 1889 B
Observations anatomiques sur les cétacés.
C. R. Congr. internat. Zool., I, Paris, 1889, 302-304.

Bouvier, L. E.—Continued 1892 A
Observations anatomiques sur d' *Hyperoodon rostratus* Lilljeborg.
Ann. Sci. nat. (7), XIII, 259-320, pls. vii, viii.
This paper is devoted almost wholly to a description of the soft anatomy.

Bovard, John F. 1907 A
Notes on Quaternary Felidæ from California.
Bull. Dept. Geol., Univ. Calif., V, 155-166, pls. xiii, xiv.
Abstract in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 133-134; Geol. Centralbl., XII, 219; Rev. crit. Paléozool., XII, 76.

Bovero, Alfonso 1905 A
Intorno ad un gruppo di singolari canali vascolari del postsfenoide negli "Sciruomorpha."
C. R. Assoc. Anatomistes, VII, 114-119, 4 text-figs.

Bowen, C. F. 1915 A
The stratigraphy of the Montana group.
U. S. Geol. Surv., Profess. Pap. XC, 93-153, plate X.

—— 1918 A
The stratigraphy of the Hanna Basin, Wyoming.
U. S. Geol. Surv. Profess. Pap. CVIII, 227-235, chart and map.

Bowers, Stephen 1878 A
Santa Rosa Island [California].
Rep. Smithson. Instn. for 1877, 316-320.

Boyd, C. H. 1882 A
Remains of the walrus(?) in Maine.
Proc. U. S. Nat. Mus., IV, 234-235.

Bradley, F. H. 1866 A
Preliminary notice of certain beds of fish-remains, in the Hamilton group of Western New York.
Amer. Jour. Sci. (2), XLII, 70-72.

—— 1870 A
Geology of Grundy, Will, Kankakee, Iroquois, Vermillion, Champaign, Edgar, and Ford Counties [Illinois].
Geol. Surv., Ill., IV, 190-275.

Bradley, O. Charnock 1903 A
Two cases of supernumerary molars; with remarks on the form of the lower cheek-teeth of the horse.
Anat. Anz., XXIV, 112-119, 2 text-figs.

—— 1903 B
A method of craniometry for mammals.
Proc. Roy. Phys. Soc., Edinb., XV, 43-56, 4 figs.

Bradley, O. Charnock—Cont'd. 1904 A

On the trapezium (os multangulum majus) of the horse.

Proc. Roy. Phys. Soc. Edinb., XVI, 9-18, 2 text-figs.

—— 1905 A

Notes on the skull of a lion.

Anat. Anz., XXVII, 317-323, 2 text-figs.

—— 1905 B

A contribution to the development of the skeleton of the lion.

Anat. Anz., XXVII, 469-480, 13 text-figs.

—— 1905 C

On variation in the number and form of the premolars and molars of the horse.

Vet. Jour., 1905, 244-253, 2 figs.

There is a bibliography of 9 titles.

—— 1906 A

Notes on variation of the horse's carpal bones.

Vet. Jour. (n.s.), XIII, 542-551, 6 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 120.

—— 1906 B

A contribution to the development of the inter-phalangeal sesamoid bone.

Anat. Anz., XXVIII, 528-536, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 121.

—— 1907 A

Craniometrical observations on the skull of *Equus prjevalskii* and other horses.

Proc. Roy. Soc. Edinb., XXVII, 46-50.

—— 1908 A

Note on the interparietal region of the skull of the dog and horse.

Vet. Jour. (n.s.), XV, 485-490, 21 figs.

Branca, W. 1907 A

Die Eigenart der fossilen Säugetierfauna Patagoniens.

Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1907, 8-11.

—— 1908 A

Sind alle im Innern von Ichthyosauren liegenden Jungen ausnahmslos Embryonen?

Abh. Akad. Wiss. Berlin, 1907, 1-34, 1 plate, 2 text-figs.

Abstract in Geol. Centralbl., XI, 28-31; Wiss. Rundschau, XXIII, 434.

Branca, W.—Continued 1908 B

Fossile Flugtiere und Erwerb des Flugvermögens.

Abh. Akad. Wiss. Berlin, 1908, 1-49, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal. 1908, II, Ref., 108-110; Geol. Centralbl., XI, 102-105; Wiss. Rundshau, XXIV, 485-487; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 161.

—— 1908 C

Nachtrag zur Embryonenfrage bei Ichthyosaurus.

Sitz.-Ber., Akad. Wiss. Berlin, 1908, 392-396.

Abstract in Geol. Centralbl., XI, 331.

—— 1914 A

Die Riesengrösse sauropoden Dinosaurier von Tendaguru, ihr Aussterben und die Bedingungen ihrer Entstehung.

Arch. Biontol., III, 73-78.

—— 1915 A

Eininge Betrachtungen über die ältesten Säuger der Trias- und Liaszeit.

Abh. Akad. Wiss. Berlin, 1915, 1-77, figs. 1-16.

Abstract in Geol. Zentralbl., XXII, 317.

Brandes, G. 1900 A

Ueber eine Ursache des Aussterbens einiger diluvialer Säugethiere.

Corresp.-Bl. deutsch. Ges. Anthrop., XXXI, 103-107

Brandt, Alex. 1907 A

Ueber den Schwanz des Mammuts (*Elephas primigenius* Blmb.).

Biol. Centralbl., XXVII, 301-311, 4 text-figs.

Brandt, Johann Friedrich 1833 A

Ueber den Zahnbau der Stellerschen Seekuh (*Rytina stelleri*), nebst Bemerkungen zur Characteristik der in zwei Unterfamilien zu zerfällenden Familie der pflanzenfressenden Cetaceen.

Mém. Acad. Sci., St. Pétersb. (6), II, 103-118, pl. ii.

—— 1833 B

De Solenodonte novo mammalium insectivorum genere.

Mém. Acad. Sci. St. Pétersb. (6), II, 459-478, pls. i, ii.

—— 1836 A

Sur la découverte de deux osselets nouveaux dans les crânes des oiseaux stéganopodes.

L'Institut, Paris, IV, 403.

Brandt, Johann Friedrich—Cont'd.

1848 A

On the position in which the mammoth and rhinoceros have been found in Siberia; from a letter to Baron A. von Humboldt.

Quart. Jour. Geol. Soc., IV, 9-12. (Translations and notices.) From Monatsber. Akad. Wiss. Berlin, 1846, 322.

——— 1853 A

Die Gruppen und Gattungen der Raubvögel Russlands in exomorphischer und craniologischer Beziehung.

Jour. Ornith., I, 178-195, 225-240.

——— 1862 D

Remarks on the skeleton of *Rhytina*.

Bull. Soc. Natural., Moscow, XXXIV, pt. 2, 612-613.

——— 1865 A

Bemerkungen über die Classification der Kaltblütigen Rückenmarkthiere zur Beantwortung der Frage: Was ist ein Fisch?

Mém. Acad. Sci. St. Pétersb. (7), IX, No. 3, 1-30.

Abstract in Bull. Acad. Sci. St. Pétersb., VIII, 535-536.

——— 1866 A

Mittheilungen über die Gestalt und Unterscheidungsmerkmale des Mammuth oder Mamont (*Elephas primigenius*).

Mel. Biol., V, 567-594, 1 pl. Also "Ergänzungen," 640-644.

From Bull. Acad. Sci. St. Pétersb., X, 93-111.

——— 1866 B

Zur lebensgeschichte des Mammuth.

Bull. Acad. Sci. St. Pétersb., X, 111-118. Also Mel. biol., V, 595-605.

——— 1866 D

Mittheilungen über die Naturgeschichte des Mammuth oder Mamont (*Elephas primigenius*). Mittheilungen über die Gestalt und Unterscheidangsmerkmale.

St. Pétersburg, 1866, 8vo., 1-41 pages, 1 pl.

Abstract in Neues Jahrb. Min. Geol. Pal., 1866, 757-760.

——— 1866 E

Einige Worte zur Ergänzung meiner Mittheilungen über die Naturgeschichte des Mammuth.

Bull. Acad. Sci. St. Pétersb., X, 361-364. Also in Mel. biol., V, 640-644.

Brandt, Johann Friedrich—Cont'd.

1871 A

Bericht über den Fortgang meiner Studien über die Cetaceen, welche das grosse zur Tertiärzeit von Mitteleuropa bis Centralasien hinein ausgedehnte Meeresbecken bevölkerten.

Bull. Acad. Sci. St. Pétersb., XVI, cols. 563-566.

Also in Mel. biol. Acad. Sci. St. Petersb., VIII, 193-197.

———, and **J. N. Woldrich** 1887 A

Diluviale europäisch-nordasiatische Säugethierfauna und ihre Beziehungen zum Menschen.

Mém. Acad. Sci. St. Pétersb. (7), XXXV, No. 10, i-iv+1-162 pages.

Abstract in Jahrb. Min. Geol. Pal., 1890, II, 428-431.

Branner, John C. 1909 A

Description of the Santa Cruz quadrangle.

Folio U. S. Geol. Surv., CLXIII, 1-12, 3 maps, 2 pls.

Branson, E. B. 1905 A

Notes on some Carboniferous cochliodonts with descriptions of seven new species.

Jour. Geol., XIII, 20-34, pls. i, ii.

Abstract in Geol. Centralbl., VII, 428.

——— 1905 B

Structure and relationships of American Labyrinthodontidæ.

Jour. Geol., XIII, 568-610, 19 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 128-132; Geol. Centralbl., XI, 108; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 160.

——— 1906 A

Fish remains from the Salem limestone of Indiana.

Geol. Surv. Ind., XXX, 1376-1394, pls. xli-xlii.

——— 1908 A

Cladodus compressus, a correction.

Science (n.s.), XXVII, 311-312.

——— 1908 B

Dinichthys intermedius Newberry from the Huron shale.

Science (n.s.), XXVIII, 94.

——— 1908 C

Notes on *Dinichthys terrelli* Newberry, with a restoration.

Ohio Naturalist, VIII, 363-369, 2 text-figs.

Abstract in Geol. Centralbl., XIII, 299.

——— 1909 A

Notes on some dinichthyids from northern Ohio.

Science (n.s.), XXIX, 197.

Branson, E. B.—Continued 1910 A

Amphibian footprints from the Mississippian of Virginia.

Jour. Geol., XVIII, 356-358, 1 text-fig.
Abstract in Geol. Centralbl., XV, 651.

—— 1911 A

Notes on the osteology of the skull of *Pariotichus*.

Jour. Geol., XIX, 135-139, pl. i.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 133; Geol. Centralbl., XVII, 43.

—— 1911 B

Notes on the Ohio shales and their faunas.

Univ. Missouri Bull., II, No. 2, 23-32, pls. i-iii.

—— 1914 A

The Devonian fishes of Missouri.

Univ. Missouri Bull., XV, No. 31 (Sci. ser., II, No. 4), 59-74, pls. i-iv, 1 text-fig.

—— 1916 A

The lower Embar of Wyoming and its fauna.

Jour. Geol., XXIV, 639-664, pls. i-vi.

—— 1918 A

Geology of Missouri.

Bull. Geol. Surv. Missouri, XIX, No. 15, 1-172, 58 figs.

—— 1922 A

The Devonian of Missouri.

Missouri Bur. Geol. Mines (2), XVII, i-x+ 1-165 pages, pls. i-xxxix.
Pages 269 to 275 are occupied by the bibliography.

—— 1927 A

Triassic-Jurassic "Red beds" of the Rocky Mountain region.

Jour. Geol., XXXV, 607-630, 3 figs.

——, and M. G. **Mehl** 1928 A

Triassic vertebrate fossils from Wyoming.

Science (n.s.), LXVII, 324-325.

Brauer, August 1908 A

Die neuesten Forschungen über die fossilen Saurier.

Naturw. Wochenschr., XXIV (N.F. VIII), 88-93, 7 figs.
An abstract of a course of lectures.

—— 1914 A

Tiergeographie.

Hertwig and Wettstein's Abstammungslehre: Systematik, Palæontologie, Biogeographie.
Teubner: Leipzig and Berlin. Pages 264-302.

Braun, M. 1906 A

Bemerkungen über das Zungenbein von *Mustela martes*.

Zool. Anz., XXIX, 674-675, 1 text-fig.

—— 1906 B

Die Reste hinterer Extremitäten bei den Walen.

Schrift. phys. ökonom. Ges. Königsb., XLVI, 131.

—— 1908 A

Über das Brustflossenskelet der Cetaceen.

Schrift. phys. ökonom. Ges. Königsb., XLVIII, 400-410.

—— 1909 A

Das Skelett eines Weisswales (*Delphinapterus leucas* Pall.).

Schrift. phys. ökonom. Ges. Königsb., XLIX, 409-412.

Brauns, David A. 1890 A

Ein Beitrag zu der Stammesgeschichte der Sauropsiden.

Leopoldina, XXVI, 147-152, 160-164, 186-188, 201-203, 12 figs.

Braus, H. 1899 A

Beiträge zur Entwicklung der Muskulatur und die peripheren Nervensystems der Selachier.

Morphol. Jahrb., XXVII, 501-629, pls. xxii-xxv, 12 text-figs.
The bibliography occupies pages 622-626.

—— 1900 A

Die Enstehung der Wirbeltiergliedmassen.

Sitz.-Ber. phys.-med. Ges. Würzb., 1900, 45-46.
A brief note announcing adherence to Gegenbaur's theory.

—— 1901 A

Über neuere Funde versteinerter Gliedmassenkorpel und -muskeln von Selachiern.

Verh. phys.-med. Ges. Würzb. (N.F.), XXXIV, 177-192, 8 text-figs.
For remarks on this paper see Neues Jahrb. Min. Geol. Pal., 1905, II, 313-314.

—— 1901 B

Die Muskeln und Nerven der Ceratodusflosse. Ein Beitrag zur vergleichenden Morphologie der freien Gliedmasse bei niederen Fischen und zur Archipterygiumtheorie.

Denk. med.-naturw. Ges. Jena, IV, 137-300, pls. xxi-xxix, 25 text-figs.
The bibliography includes 150 titles.

Braus, H.—Continued 1904 A

Tatsächliches aus der Entwickelung des Extremitätenskelettes bei den niedersten Formen. Zugleich ein Beitrag zur Entwickelungsgeschichte des Skelettes der Pinnæ und der Visceralbögen.

Denk. med.-naturw. Ges. Jena, XI, (Festschr. 70sten. Geburtst. Ernst Haeckel), 377-436, pls. xiii, xiv, 13 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 109-112.

—— 1906 A

Die Entwickelung der Form der Extremitäten und des Extremitätenskeletts.

Hertwig's Handb. vergl. exper. Entwickelungsl. Wirbelt., III, pt. 2, 167-338, text-figs. 178-266.

On pages 331-336 is an extended bibliography of the subject. The paper appears to have been published as early as 1904.

—— 1906 B

Ueber den embryonalen Kiemenapparat von *Heptanchus*.

Anat. Anz., XXIX, 545-560, 2 text-figs.

—— 1907 A

Modelle des Kopfskeletts von *Hexanchus* und *Heptanchus*.

Anat. Anz., Ergänzungsh., XXX, 249-251.

—— 1908 A

Entwicklungsgeschichtliche Analyse der Hyperdactylie.

Münch. Med. Wochenschr., LV, 386-390, 3 figs.

Has references to 10 other works on the subject.

—— 1909 A

Gliedmassenpfropfung und Grundfragen der Skeletbildung. I: Die Skeletanlage vor Auftreten des Vorknorpels und ihre Bezeihung zu den späteren Differenzierungen.

Morphol. Jahrb., XXXIX, 155-301, pls. xiv-xvi, 14 text-figs.

—— 1919 A

Der Brustchulterapparat der Froschlurche.

Sitz.-Ber. Heidelb. Akad. Wiss., 1919, Abh. 15, 1-50, pls. i-iv, 18 text-figs.

Citations of the literature on pages 47-48.

Bretz, J. Harlen 1913 A

Glaciation of the Puget Sound region.

Bull. Wash. Geol. Surv., VIII, 1-244, pls. i-xxiv, 27 text-figs.

Breunig, Stephan 1924 A

Beiträge zur Stammesgeschichte der Rhinocerotidæ.

Verh. zool.-bot. Ges. Wien, LXXIII, 5-46, 36 figs.

Breyne, J. P. 1738 A

Observations on mammoths' bones and teeth found in Siberia.

Phil. Trans. Roy. Soc. Lond., XL, 125-138, pls. i-iii.

Reports the discoveries of Daniel Gottlieb Messerschmidt.

Bridge, T. W. 1878 A

On the osteology of *Polyodon folium*.

Phil. Trans. Roy. Soc. Lond., CLXIX, 683-733, pls. lv-lvii, 2 text-figs.

—— 1896 A

The mesial fins of ganoids and teleosts.

Jour. Linn. Soc. Zool., XXV, 530-602, pls. xxi-xxiii.

There is a bibliography of 14 titles.

—— 1897 A

The morphology of the skull in the Paraguayan *Lepidosiren* and other Dipnoi.

Proc. Zool. Soc. Lond., 1897, 602-603.

An abstract of Bridge, T. W., 1898 A.

—— 1897 B

On the presence of ribs in *Polyodon* (*Spatularia*) *folium*.

Proc. Zool. Soc. Lond., 1897, 722-724, 1 fig.

—— 1904 A

Fishes (exclusive of the Teleostei).

Cambridge Nat. Hist., VII, 139-537, text-figs. 91-324.

Abstracts and reviews in Science (n.s.), XXI, 653-661; Amer. Naturalist, XXXIX, 339-340; Nature, LXXII, 103-105.

——, and A. C. **Haddon** 1893 A

The air-bladder and Weberian ossicles of the siluroid fishes.

Phil. Trans. Roy. Soc. Lond., CLXXXIV, 65-333, pls. xi-xix.

The bibliography presents 44 titles.

For Bridge and Haddon's first paper on this subject see Proc. Roy. Soc., XLVI, 1889, and LII, 1892.

Briggs, C. 1838 B

Report of C. Briggs jr., 4th assistant geologist, to W. W. Mather, geologist.

Geol. Surv. Ohio, First Ann. Rep., 71-98.

Brindley, H. H. 1900 A

Note on some abnormalities of the limbs and tail of dipnoan fishes.

Proc. Cambridge Philos. Soc., X, 325-327, pl. xiv.

Bringier, L. 1821 A
Fossil remains of the mastodon in Missouri.
Amer. Jour. Sci. (1), III, 22-23.

Brinkmann, August 1922 A
Equidenstudien I-II.
Aarbok Bergens Mus., 1919-1920 (1922), Naturvid. Raekke, art. 5, i-33, 6 tables, pls. i-iii.
The bibliography presents 35 titles.

Briquel, P. 1898 A
Les dents de *Ceratodus*.
Bibl. Anat., VI, 1898, 11-16, 2 text-figs.

Broadhead, Garland C. 1874 A
Bates County [Missouri].
Geol. Surv. Missouri, Rep. 1873-1874, 154-178.

—— 1875 A
Geology of Moultrie, Macon, and Piatt Counties [Illinois].
Geol. Surv. Ill., VI, 185-196.

—— 1898 A
Geology of Boone County, Missouri.
Geol. Surv. Missouri, XII, 376-388, pl. xii and maps.

Broeck, A. J. P. See **Van den Broeck.**

Brohl, Engelbert 1909 A
Die sogenannten Hornfäden und die Flossenstrahlen der Fische.
Jena. Zeitschr. Naturwiss., XLV, 345-380, pls. xxviii, xxix, 5 text-figs.
The appended bibliography comprises 38 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 135.

Brohmer, P. 1908 A
Die Sinneskanäle und die Lorenzischen Ampullen bei *Spinax*-Embryonen.
Anat. Anz., XXXII, 25-40, 8 figs.
There is a bibliography of 26 titles.

—— 1909 A
Der Kopf eines Embryos von *Chlamydoselachus* und die Segmentierung des Selachierkopfes.
Jena. Zeitschr. Naturwiss., XLIV, 646-698, pls. xxxiv-xxxvii, 15 text-figs.

Broili, Ferdinand 1902 A
Ein Beitrag zur Kenntniss von *Diplocaulus*, Cope.
Centralbl. Min. Geol. Pal., 1902, 536-541, 4 text-figs.
Abstracts in Geol. Centralbl., IV, 119; Rev. crit. Paléozool., VIII, 20; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 91.

Broili, Ferdinand—Continued 1904 A
Permische Stegocephalen und Reptilien aus Texas.
Palaeontogr., LI, 1-49, 51-120, pls. i-xiii, 5 text-figs.
At the conclusion of this paper is a list of about 280 works bearing on the subject.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 147-150; Geol. Centralbl., VI, 123.

—— 1904 B
Ueber *Diacranodus texensis* Cope (= *Didymodus? compressus* Cope).
Neues Jahrb. Min. Geol. Pal., Beil.-Bd., XIX, 467-484, pls. xxiv, xxv.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 157; Geol. Centralbl., VIII, 94.
On page 819 Geol. Centralbl. the name *Didymosaurus? compressus* is used.

—— 1904 C
Pelycosaurierreste von Texas.
Zeitschr. deutsch. Geol. Ges., LVI, 268-274, pl. xvii, 1 text-fig.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 163; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 313.

—— 1904 D
Stammreptilien.
Anat. Anz., XXV, 577-587, 14 text-figs.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 162-163; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 313.

—— 1905 A
Beobachtungen an *Cochleosaurus bohemicus* Fritsch.
Palaeontogr., LII, 1-16, with pls. i, ii, 3 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 146-147; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 164.

—— 1907 A
Ein neuer *Ichthyosaurus* aus der norddeutschen Kreide.
Palaeontogr., LIV, 139-162, pls. xii, xiii, 14 text-figs.
Abstract in Geol. Centralbl., XII, 516-517; Sci. Progress, II, 517.

—— 1908 A
Ein Dicynodontierrest aus der Karooformation.
Neues Jahrb. Min. Geol. Pal., 1908, I, 1-15, pl. i, 5 text-figs.
Abstract in Geol. Centralbl., XII, 598.

—— 1908 B
E. C. Case: Notes on the skull of *Lysorophus tricarinatus* Cope (Case, E. C., 1908 A).
Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 269.

Broili, Ferdinand—Continued 1908 C

Ein montiertes Skelett von *Labidosaurus hamatus* Cope, einem Cotylosaurier aus dem Perm von Texas.

Zeitschr. deutsch. Geol. Ges., LX, 63-67, pl. iii.

Abstracts in Geol. Centralbl., XII, 597-598; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 266.

—— 1908 D

Über die rhachitomen Wirbel der Stegocephalen.

Zeitschr. deutsch. Geol. Ges., LX, Monatsb., 235-240, 1 text-fig.

Abstracts in Geol. Centralbl., XIII, 298; Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 138.

—— 1908 E

Systematische und biologische Bemerkungen zu der permischen Gattung *Lysorophus*.

Anat. Anz., XXXIII, 290-298, 3 text-figs.

See Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 125, 126, for author's abstract.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 159.

—— 1908 F

Über *Sclerocephalus* aus der Gaskohle von Nürschan und das Alter dieser Ablagerungen.

Jahrb. geol. Reichsanst. Wien, LVIII, 49-70, pl. i.

Abstract in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 266-267.

—— 1909 A

Neue Ichthyosaurierreste aus der Kreide Norddeutschlands und das Hypophysenloch bei Ichthyosauriern.

Palaeontogr., LV, 295-302, pl. xxvii, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 139; Geol. Centralbl., XIII, 652-653.

—— 1911 A

[Remark on Jaekel's reconstruction of *Naosaurus*.]

Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 132-133.

—— 1912 A

Zur Osteologie des Schädels von *Placodus*.

Palaeontogr., LIX, 147-155, pl. xiv, 4 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 144.

—— 1912 B

Ueber *Pteryodactylus micronyx* H. v. Meyer.

Zeitschr. deutsch. Geol. Ges., LXIV, 492-500, pl. xii.

Broili, Ferdinand—Continued 1913 A

Über zwei Stegocephalenreste aus dem texanischen Perm.

Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 96-100, pl. ix.

Abstract in Geol. Centralbl., XX, 234.

—— 1913 B

Résumé of S. W. Williston: Primitive reptiles: a review.

Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 518-520 (Williston, S. W., 1912 B).

—— 1913 C

D. M. S. Watson: The larger Coal Measure Amphibia.

Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 527-530.

A résumé of Watson's paper published in Mem. Manchester Soc., 1912-1913, LVII, 1912, No. 1, 1-13.

—— 1913 D

F. v. Huene: Über *Lysorophus* aus dem Perm von Texas.

Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 350-352.

A review of Huene's paper published in Anat. Anz., XLIII, 389-396.

—— 1914 A

Abstract of S. W. Williston: The primitive structure of the mandible in amphibians and reptiles (Williston, S. W., 1913 B).

Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 164.

—— 1914 B

Résumé of D. M. Watson: *Batrachiderpeton lineatum* Hancock and Atthey, a coal-measure Stegocephalian.

Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 165-166.

A résumé of Watson's paper published in Proc. Zool. Soc. London, 1913, 949-962.

—— 1914 C

Über den Schädelbau von *Varanosaurus acutirostris*.

Centralbl. Min. Geol. Pal., 1914, 26-29, 1 text-fig.

Abstract in Geol. Zentralbl., XXIV, 187.

—— 1915 A

Über *Capitosaurus arenaceus* Münster.

Centralbl. Min. Geol. Pal., 1915, 569-575, 2 text-figs.

—— 1915 B

Beobachtungen über *Tanystropheus conspicuus* H. v. Meyer.

Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 51-61, pls. ii, iii.

Abstract in Geol. Zentralbl., XXII, 446.

Broili, Ferdinand—Continued 1915 C

Review of O. Jaekel: Ueber die Wirbeltierfunde in der oberen Trias von Halberstadt.

Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 285.

—— 1916 A

Einige Bemerkungen über die Mixosauridæ.

Anat. Anz., XLIX, 475-494, 3 figs.

References to the literature in foot-notes.

Abstract in Geol. Zentralbl., XXIV, 28.

—— 1917 A

Unpaare Elemente im Schädel von Tetrapoden.

Anat. Anz., XLIX, 561-576, 19 figs.

Citations of the literature in foot-notes.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 206-207; Geol. Zentralbl., XXIV, 28.

—— 1919 A

Ctenochasma gracile Oppel.

Geognost. Jahresh., 1916-1917, XXIX, XXX, 299-306, pl. vii.

—— 1920 A

Ein neuer Placodontier aus dem Rhaet der bayerischen Alpen.

Sitz-Ber. Akad. Wiss. Berlin, 1920, 311-320, 2 figs.

—— 1921 A

Ein Fund von cf. *Placerias* Lucas in der kontinentalen Trias von Europa.

Centralbl. Min. Geol. Pal., 1921, 339-343, 2 figs.

Abstracts in Geol. Zentralbl., XXVI, 536; XVIII, 268; XXVIII, 283.

—— 1922 A

Ueber den feinen Bau der verknöcherten Sehnen (= verknöcherten Muskeln) von *Trachodon.*

Anat. Anz., LV, 465-475, 5 figs.

—— 1924 A

Ein Cotylosaurier aus der oberkarbonischen Gaskohle von Nürschan in Böhmen.

Sitz.-Ber. Akad. Wiss. München, 1924, 3-30, 5 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1924, I, Ref., 279.

—— 1925 A

Ein *Pterodactylus* mit Resten der Flughaut.

Sitz.-Ber. Akad. Wiss. München, 1925, 23-24, 3 pls.

—— 1926 A

Über *Sclerocephalus häuseri* Goldfuss.

Sitz.-Ber. Akad. Wiss. München, 1926, 199-222, pls. i, ii, 9 text-figs.

References to the literature in foot-notes.

Broili, Ferdinand—Continued 1926 B

Die intercentra bei *Pleurosaurus.*

Anat. Anz., LXI, 171-174, 5 figs.

—— 1926 C

Ein neuer Fund von *Pleurosaurus* aus dem Malm Frankens.

Abh. Bayer. Akad., XXX, Abh. 8, 1-48, 5 pls., 11 text-figs.

Citations of the literature in foot-notes.

—— 1927 A

Über den Zahnbau von *Seymouria.*

Anat. Anz., LXIII, 185-188, 1 fig.

—— 1927 B

Ein Exemplar von *Rhamphorhynchus* mit Resten von Schwimmhaut.

Sitz.-Ber. Akad. Wiss. Munchen, 1927, 29-48, pls. i-iii, vii, 7 text-figs.

—— 1927 C

Ein *Rhamphorhynchus* mit Spuren von Haarbedeckung.

Sitz.-Ber. Akad. Wiss. München, 1927, 49-65, pls. iv-vii.

——, and E. **Fischer** 1917 A

Trachelosaurus fischeri nov. gen., nov. sp. Ein neuer Saurier aus dem Buntsandstein von Bernburg.

Jahrb. geol. Landesanst. Berlin, XXXVII, 1916 (1917), 359-414, pls. xxxi, xxxii, 15 figs.

Numerous references to the literature in foot-notes. Abstract in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 223-226.

Broman, Ivar 1920 A

Untersuchungen über die Embryonal-Entwicklung der Pinnipedia. V: Über die Entwicklung und den Bau des Extremitätenskeletts der Robben nebst Bemerkungen über die Entstehung von Hypo- und Hyperphalangie bei den Säugetieren im Allgemeinen.

Deutsche Südpolar-Exped., 1901-1903; Zool. Bd., VIII, 299-406, pls. xxi-li, 26 text-figs.

55 titles in the bibliography.

Bronn, Heinrich G. 1848 A

Index palaeontologicus oder Uebersicht der bis jezt bekannten fossilen Organismen. A: Nomenclator palaeontologicus in alphabetischer Ordnung.

8vo., i-lxxxiv+1-775.

Pages xxii-lvii are occupied by a bibliography of the subject. Under the generic names in the Nomenclator are arranged the names of the species referred up to that time to each.

Bronn, Heinrich G.—Continued 1848 B

Index palaeontologicus oder Uebersicht der bis jezt bekannten fossilen Organismen. A: Nomenclator palaeontologicus in alphabetischer Ordnung.

8vo., 777-1382.

—— 1848 C

On Norwood and Owen's description of *Macropetalichthys rhapheidolabis*.

Neues Jahrb. Min. Geol. Pal., 1848, Ref., 872.

—— 1849 A

Index palaeontologicus oder Uebersicht der bis jezt bekannten fossilen Organismen. B: Enumerator palaeontologicus: Systematische Zusammenstellung und geologische Entwickellungs-Gesetze der organischen Reiche.

8vo., 1-1106 pages.

—— 1849 B

Embryo of *Ichthyosaurus communis*.

Neues Jahrb. Min. Geol. Pal., 1849, Ref., 383.

Review of Pearce, H. C., 1846 A.

—— 1862 A

On *Dinocyon thenardi* Jourdan.

Neues Jahrb. Min. Geol. Pal., 1862, Ref., 120.

Note regarding Jourdain's new species described in C. R. Acad. Sci. Paris, LIII, 962-963.

—— 1862 B

On A. Kölliker's "Ueber das Ende der Wirbelsäule der Ganoiden und einiger Teleostier." Abstract.

Neues Jahrb. Min. Geol. Pal., 1862, Ref., 380-381.

—— 1862 C

Bemerkungen über das zu dem älteren *Halitherium*-Schädelgehörige Skelett.

Neues Jahrb. Min. Geol. Pal., 1862, Ref., 416-418.

Broom, Robert 1890 A

On the fate of the quadrate in mammals.

Ann. Mag. Nat. Hist. (6), VI, 409-411.

The bibliography presents 9 titles.

—— 1896 A

On the homology of the palatine process of the mammalian premaxillary.

Proc. Linn. Soc. N. S. Wales (2), x, 477-485.

Broom, Robert—Continued 1896 B

On a small fossil marsupial with large grooved premolars.

Proc. Linn. Soc. N. S. Wales (2), x, 563-567, pls. xxv, xlv.

—— 1897 B

A contribution to the comparative anatomy of the mammalian organ of Jacobson.

Trans. Roy. Soc. Edinb., XXXIX, 231-255, pls. i, ii.

Issued separately Nov. 18, 1897.

—— 1897 C

On the occurrence of an apparently distinct prevomer in *Gomphognathus*.

Jour. Anat. Physiol. Lond., XXXI, 277-279.

—— 1897 D

On the existence of a sterno-coracoidal articulation in a fœtal marsupial.

Jour. Anat. Physiol. Lond., XXXI, [(2), XI], 513-515, 1 text-fig.

—— 1898 A

Is there a critical period in marsupial development?

Jour. Anat. Physiol. Lond., XXXII [(2), XII], 714-720, 2 text-figs.

—— 1899 A

On the development and morphology of the marsupial shoulder-girdle.

Trans. Roy. Soc. Edinb., XXXIX, 749-770, pls. i, ii.

—— 1901 A

On the structure and affinities of *Udenodon*.

Proc. Zool. Soc. Lond., 1901, II, 162-190, pls. xvi-xviii, 2 text-figs.

—— 1901 B

On the ossification of the vertebræ in the wombat and other marsupials.

Proc. Linn. Soc. N. S. Wales, XXV, 735-739, pl. xlix.

—— 1902 A

Remarks on certain differences in the skulls of dicynodonts, apparently due to sex.

Proc. Zool. Soc. Lond., 1902, II, 86-88, 1 text-fig.

—— 1902 B

On the mammalian and reptilian vomerine bones.

Nature, LXVII, 168.

Abstract in Rev. crit. Paléozool., VIII, 9-10.

Broom, Robert—Continued 1902 C

On the early condition of the shoulder-girdle in the polyprotodont marsupials *Dasyurus* and *Perameles*.

Jour. Linn. Soc. Zool., xxviii, 449-454, pl. xli.

—— 1902 D

On the mammalian and reptilian vomerine bones.

Proc. Linn. Soc. N. S. Wales, xxvii, 545-560, pls. xxiv-xxvi.

There is a bibliography of 15 titles.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, ii, Ref., 439-440.

—— 1903 A

On the structure of the palate in the primitive theriodonts.

Geol. Mag. (4), x, 343-345, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, ii, Ref., 441; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 160; Geol. Mag. (4), x, 343.

—— 1903 B

On a new stegocephalian (*Batrachosuchus browni*) from the Karoo beds of Ariwal North, South Africa.

Geol. Mag. (4), x, 499-501, 2 text-figs.

—— 1903 C

On the axis, atlas and proatlas in the higher theriodonts.

Proc. Zool. Soc. Lond., 1903, i, 177-180, pl. xviii.

—— 1903 D

On the classification of the theriodonts and their allies.

Rep. S. African Assoc. Adv. Sci., 286-294.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 478; Rev. crit. Paléozool., viii, 213-216; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 159-161.

—— 1903 E

On an almost perfect skeleton of *Pareiasaurus serridens* Owen.

Ann. S. African Mus., iv, 123-138, pls. xv, xvi.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 141-142; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 159-161.

—— 1903 F

On the structure of the shoulder-girdle in *Lystrosaurus*.

Ann. S. African Mus., iv, 139-141, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 142; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 159-161.

Broom, Robert—Continued 1903 G

On the presence of a pair of distinct prevomers in *Titanosuchus*.

Ann. S. African Mus., iv, 144-146.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 318.

—— 1903 H

On some new primitive theriodonts in the South African Museum.

Ann. S. African Mus., iv, 147-158, pls. xvii, xviii.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 142-143; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 160.

—— 1903 I

On the mammalian and reptilian vomerine bones.

Proc. Linn. Soc. N. S. Wales, xxvii, 545-560, pls. xxiv-xxvi.

The bibliography presents 15 titles.

—— 1903 J

On the development of the pterygo-quadrate arch in the Lacertilia.

Jour. Anat. Physiol. Lond., xxxvii (n.s., xvii), 107-111, 6 text-figs.

—— 1903 K

On the skull of a true lizard (*Paliguana whitei*) from the Triassic beds of South Africa.

Rec. Albany Mus., i, 1-3, pl. i, figs. 1, 2.

—— 1903 L

On the lower jaw of a small mammal from the Karoo beds of Ariwal North, South Africa.

Geol. Mag. (4), x, 345, fig.

—— 1904 A

On the structure of the theoriodont mandible, and on its mode of articulation with the skull.

Proc. Zool. Soc. Lond., 1904, i, 490-498, pl. xxxv, 1 text-fig.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), Abth. 3, 49-51; Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 140.

—— 1904 B

The origin of the mammalian carpus and tarsus.

Trans. S. African Philos. Soc., xv, 89-96, pl. vii.

Abstract in Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 169.

—— 1904 C

Observations on the structure of *Mesosaurus*.

Trans. S. African Philos. Soc., xv, 103-112, pl. ix.

Broom, Robert—Continued 1904 D

On some points in the anatomy of the anomodont skull.

Rec. Albany Mus., I, 75-82, pl. iv.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 165; Rev. crit. Paléozool., VIII, 218-219.

—— 1905 A

On some points in the anatomy of the theriodont reptile *Diademodon*.

Proc. Zool. Soc. Lond., 1905, I, 96-102, pl. x.

—— 1905 B

On the affinities of the primitive reptile *Procolophon*.

Proc. Zool. Soc. Lond., 1905, I, 212-217.

—— 1905 C

On the use of the term Anomodontia.

Rec. Albany Mus., I, 266-269.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 141; Rev. crit. Paléozool., XI, 153-154.

—— 1905 D

On the structure and affinities of the endothiodont reptiles.

Trans. S. African Philos. Soc., XV, 259-282, pls. xii-xiv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 317-318.

—— 1905 E

On the affinities of *Tritylodon*.

Trans. S. African Philos. Soc., XVI, 73-77.

Abstract in Rev. crit. Paléozool., XI, 158.

—— 1905 F

Origin of mammals.

Nature, LXXIII, 40.

—— 1906 A

On the arrangement of the epiphyses of the mammalian metacarpals and metatarsals.

Anat. Anz., XXVIII, 106-108, 2 text-figs.

Abstracts in Sci. Progress, II, 521; Rev. crit. Paléozool., XI, 213; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 165.

—— 1906 B

On the South African diaptosaurian reptile *Howesia*.

Proc. Zool. Soc. Lond., 1906, II, 591-600, pls. xl, xli.

—— 1906 C

The origin of mammals.

Rep. Brit. Assoc. Adv. Sci., LXXV, South Africa, 1905, 437-438.

Brief notices in Geol. Centralbl., IX, 416; X, 40. Abstracts in Nature, LXXIII, 1906, 40; Sci. Progress, II, 520; Rev. crit. Paléozool., XII, 225; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 172.

Broom, Robert—Continued 1906 L

On the early development of the appendicular skeleton of the ostrich, with remarks on the origin of birds.

Trans. S. African Philos. Soc., XVI, 355-368, pl. ix.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 441-442; Rev. crit. Paléozool., XII, 238.

—— 1906 E

On some little-known bones of the mammalian skull.

Trans. S. African Philos. Soc., XVI, 369-372.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 172.

—— 1906 F

Note on the lacertilian shoulder girdle.

Trans. S. African Philos. Soc., XVI, 373-375.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 171.

—— 1906 G

On the South African dinosaur (*Hortalotarsus*).

Trans. S. African Philos. Soc., XVI, 201-206, pl. iii.

—— 1907 A

On some new fossil reptiles from the Karroo beds of Victoria West, South Africa.

Trans. S. African Philos. Soc., XVIII, pt. i, 31-41, pls. iii, iv.

—— 1907 B

A contribution to the knowledge of the Cape golden moles.

Trans. S. African Philos. Soc., XVIII, pt. 3, 283-311.

—— 1907 C

Some recent advances in South African paleontology.

Science (n.s.), XXVI, 796-797.

—— 1908 A

On the origin of the mammal-like reptiles.

Proc. Zool. Soc. Lond., 1907, II, 1047-1061, text-figs. 244-247.

Abstracts in Geol. Centralbl., XIII, 396-397; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 42; Sci. Progress, III, 468.

—— 1908 B

On the pareiasaurian genus *Propappus*.

Ann. S. African Mus., IV, 351-360, pl. xlv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 126.

Broom, Robert—Continued 1908 C

On the inter-relationships of the known therocephalian genera.

Ann. S. African Mus., IV, 369-372.

Abstract in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 127-128.

—— 1908 D

On a new labyrinthodont, *Rhinesuchus whaitsi*, from the Permian beds of South Africa.

Ann. S. African Mus., IV, 373-376, pl. xlvi.

Abstract in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 137.

—— 1908 E

On the homology of the mammalian alisphenoid bone.

Rep. S. African Assoc. Adv. Sci., 5th meet. Natal, 1907, 114-115.

—— 1908 F

Further observations on the Chrysochloridæ.

Ann. Transvaal Mus., I, 14-16.

—— 1909 A

The fossil fishes of the Upper Karroo beds of South Africa.

Ann. S. African Mus., VII, 251-269, pls. xii-xiii.

Abstract in Sci. Progress, IV, 673.

—— 1909 B

On the nomenclature of the elements of the amphibian shoulder-girdle.

Rep. S. African Assoc. Adv. Sci., 1908, 162-166.

—— 1909 C

Some observations on the dentition of *Chrysochloris*, and on the tritubercular theory.

Ann. Natal Gov't Mus., II, pt. 1, 129-139, pl. ii.

—— 1909 D

Observations on the development of the marsupial skull.

Proc. Linn. Soc. N. S. Wales, XXXIV, 195-214, pls. x-xvii.

—— 1909 E

On the skull of *Tapinocephalus*.

Geol. Mag. (5), VI, 400-402, 2 figs.

—— 1910 A

A comparison of the Permian reptiles of North America with those of South Africa.

Bull. Amer. Mus. Nat. Hist., XXVIII, 197-234, 20 text-figs.

Abstracts in Geol. Centralbl., XIX, 444-445; Sci. Progress, V, 686; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 32; XVIII, pt. 3, 208; Nature, LXXXIV, 402.

Broom, Robert—Continued 1910 B

On *Tritylodon*, and on the relationships of the Multituberculata.

Proc. Zool. Soc. Lond., 1910, 760-768, text-figs. 67, 68.

Abstracts in Geol. Centralbl., XVIII, 522; Nature, LXXXV, 48; Sci. Progress, V, 674; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 32.

—— 1910 C

On the relationships of the South African fossil reptiles to those of other parts of the world.

Trans. Roy. Soc. S. Africa, I, 473-477.

Abstract in Sci. Progress, V, 686; Nature, LXXXIV, 158.

—— 1911 A

On the structure of the skull in cynodont reptiles.

Proc. Zool. Soc. Lond., 1911, 893-925, pl. xlvi, text-figs. 168-180.

Abstracts in Geol. Centralbl., XVII, 617; XX, 463-464; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 24; Nature, LXXXVI, 505; Sci. Progress, VI, 578.

—— 1911 B

Note on the temnospondylous stegocephalian, *Rhinesuchus*.

Trans. Geol. Soc. S. Africa, XIV, 79-81, pl. xiii.

Abstract in Geol. Centralbl., XVII, 617.

—— 1911 C

On the affinities of *Cœnolestes*.

Proc. Linn. Soc. N. S. Wales, XXXVI, 315-320.

—— 1912 A

The morphology of the coracoid.

Anat. Anz., XLI, 625-631, 16 text-figs.

Abstracts in Geol. Centralbl., XVIII, 378; Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 426; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 163.

—— 1912 B

On the structure of the internal ear and the relations of the basicranial nerves in *Dicynodon*, and on the homology of the mammalian auditory ossicles.

Proc. Zool. Soc. Lond., 1912, 419-425, pl. lvi, text-fig. 53.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 521; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 40.

—— 1912 C

On a new species of *Propappus*, and on the pose of the pareiasaurian limbs.

Ann. S. African Mus., VII, 323-331, pls. xix-xxi.

Broom, Robert—Continued 1912 D

On some points in the structure of the dicynodont skull.

Ann. S. African Mus., VII, 337-351, 5 text-figs.

Abstract in Geol. Centralbl., XVIII, 378.

—— 1913 A

On the origin of the cheiropterygium.

Bull. Amer. Mus. Nat. Hist., XXXII, 459-464, 6 text-figs.

Abstracts in Geol. Centralbl., XX, 527; Sci. Progress, XVIII, 652; Rev. crit. Paléozool., XXI, 51; Geol. Mag. (5), X, 571.

—— 1913 B

On evidence of a mammal-like dental succession in the cynodont reptiles.

Bull. Amer. Mus. Nat. Hist., XXXII, 465-468, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 151; Rep. 83d Meet. Brit. Assoc. Adv. Sci., Birmingham, 1913 (1914), 530; Sci. Progress, VIII, 646; Geol. Mag. (5), X, 570.

—— 1913 C

On the squamosal and related bones in the mosasaurs and lizards.

Bull. Amer. Mus. Nat. Hist., XXXII, 507-508, 2 text-figs.

Briefly noticed in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 152; Sci. Progress, VIII, 643; Geol. Zentralbl., XXI, 266; Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 44.

—— 1913 D

On the structure and affinities of *Bolosaurus*.

Bull. Amer. Mus. Nat. Hist., XXXII, 509-516, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 151-152; Geol. Centralbl., XX, 527; Sci. Progress, VIII, 649; Rev. crit. Paléozool., XXI, 51; Geol. Zentralbl., XXI, 266.

—— 1913 E

On the cotylosaurian genus *Pantylus* Cope.

Bull. Amer. Mus. Nat. Hist., XXXII, 527-532, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 161-162; Sci. Progress, VIII, 649; Rev. crit. Paléozool., XXI, 51.

—— 1913 F

Studies on the Permian temnospondylous stegocephalians of North America.

Bull. Amer. Mus. Nat. Hist., XXXII, 563-595, 21 text-figs.

Abstracts Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 164-165; Sci. Progress, VIII, 650; Rev. crit. Paléozool., XXI, 52; Geol. Zentralbl., XXI, 266.

Broom, Robert—Continued 1913 G

South African fossil reptiles.

Amer. Mus. Jour., XIII, 334-346, 13 plates.

Abstract in Nature, XCII, 640.

—— 1913 H

On the structure of the mandible in the Stegocephalia.

Anat. Anz., XLV, 73-78, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 44.

—— 1913 I

On the manus and pes of *Pareiasaurus*.

Ann. S. African Mus., VII, 353-357, 2 text-figs.

—— 1913 J

A revision of the reptiles of the Karroo.

Ann. S. African Mus., VII, 361-366.

—— 1913 K

On a nearly perfect skull of a new species of the Gorgonopsia.

Ann. S. African Mus., XII, 8-12.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 163.

—— 1913 L

On the origin of the mammalian digital formula.

Anat. Anz. XLIII, 230-232, 1 fig.

Abstract in Jahresber. Anat. Entwickl (N.F.), XIX, pt. 3, 31, 145.

—— 1913 M

Note on the dicynodont vomer.

Nature, XCII, 6-7.

Abstract in Sci. Progress, VIII, 643.

—— 1913 N

The origin of mammals.

Proc. Roy. Soc. Lond. (B), LXXXVII, 87-88 (Abstract of lecture).

—— 1913 O

On the South-African pseudosuchian *Euparkeria* and allied genera.

Proc. Zool. Soc. Lond., 1913, 613-633, pls. lxxv-lxxix.

There is a bibliography of 6 titles.

—— 1913 P

On the Gorgonopsia, a suborder of the mammal-like reptiles.

Proc. Zool. Soc. Lond., 1913, 225-230, pls. xxxvi, xxxvii.

—— 1914 A

Some points in the structure of the diadectid skull.

Bull. Amer. Mus. Nat. Hist., XXXIII, 109-114, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 473; Geol. Zentralbl., XXI, 265; XXVIII, 445.

Broom, Robert—Continued 1914 B

On the structure and affinities of the Multituberculata.

Bull. Amer. Mus. Nat. Hist., XXXIII, 115-134, pls. xi, xii, 9 text-figs.

Abstracts in Bull. Geol. Soc. Amer., XXV, 140-141; Rev. crit. Paléozool., XVIII, 99; Geol. Zentralbl., XXI, 301; XXVII, 222; Nature, XCIII, 619, fig.

—— 1914 C

A further comparison of the South African dinocephalians with the American pelycosaurs.

Bull. Amer. Mus. Nat. Hist., XXXIII, 135-141, 7 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 472-473; Geol. Zentralbl., XXVIII, 446.

—— 1914 D

Structure and affinities of the Multituberculata.

Bull. Geol. Soc. Amer., XXV, 140-141. Abstract.

—— 1914 E

Relations of the American pelycosaurs to the South African dinocephalians.

Bull. Geol. Soc. Amer., XXV, 143. Abstract.

—— 1914 F

Conference on convergent evolution.

Ann. N. Y. Acad. Sci., XXII, 295-299.

—— 1914 G

The origin of mammals.

Ann. N. Y. Acad. Sci., XXIII, 302-306.

—— 1914 H

A new thecodont reptile.

Proc. Zool. Soc. Lond., 1914, 1072-1077, 2 text-figs.

—— 1915 A

On the organ of Jacobson and its relations in the "Insectivora." Part II: *Talpa, Centetes,* and *Chrysochloris.*

Proc. Zool. Soc. Lond., 1915, 157-162, 347-354, pls. i, ii, iii, iv.

—— 1915 B

On the Triassic stegocephalians *Brachyops, Bothriceps,* and *Lydekkerina,* gen. nov.

Proc. Zool. Soc. Lond., 1915, 363-368, 3 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, 137.

—— 1915 C

On the origin of mammals.

Phil. Trans. Roy. Soc. Lond. (B), CCVI, 1-48, pls. i-vii.

The bibliography comprises 99 titles.

Broom, Robert—Continued 1916 A

On the structure of the skull in *Chrysochloris.*

Proc. Zool. Soc. Lond., 1916, 449-459, pls. i, ii, 3 text-figs.

Abstract in Nature, XCVII, 315.

—— 1916 B

Pareiasaurian nomenclature.

Ann. Mag. Nat. Hist. (8), XVII, 347-348.

—— 1916 C

Discussion on the "Biologia Centrali-Americana."

Proc. Zool. Soc. Lond., 1916, 549-550.

—— 1917 A

Comments on nomenclature of cranial elements.

Bull. Geol. Soc. Amer. XXVIII, 975-978.

—— 1918 A

Observations on the genus *Lysorophus* Cope.

Ann. Mag. Nat. Hist. (9), II, 232-239, 3 text-figs.

—— 1921 A

On the structure of the reptilian tarsus.

Proc. Zool. Soc. Lond., 1921, pt. 1, 143-155, figs. 1-27.

Abstract in Sci. Progress, XVI, 215.

—— 1921 B

On some genera and species of anomodont reptiles from the Karroo beds of South Africa.

Proc. Zool. Soc. Lond., 1921, 647-674, 45 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, Ref., 145-147.

—— 1922 A

On the temporal arches of the Reptilia.

Proc. Zool. Soc. Lond., 1922, 17-26.

—— 1922 B

On the persistence of the mesopterygoid in certain reptilian skulls.

Proc. Zool. Soc. Lond., 1922, 455-460, 7 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, Ref., 147.

—— 1923 A

On the structure of the skull in the carnivorous dinocephalian reptiles.

Proc. Zool. Soc. Lond., 1923, 661-684, 17 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, Ref., 147-149.

Broom, Robert—Continued 1924 A

On some points in the structure of the pareiasaurian skull.

Proc. Zool. Soc. Lond., 1924, 499-508, figs. 1-6.

There are 9 titles in the bibliography.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, Ref., 441.

—— 1924 B

On the classification of the reptiles.

Bull. Amer. Mus. Nat. Hist., LI, 39-65, 13 figs.

—— 1924 C

Further evidence on the structure of the *Eosuchia*.

Bull. Amer. Mus. Nat. Hist., LI, 67-76, 4 figs.

—— 1925 A

On the origin of lizards.

Proc. Zool. Soc. Lond., 1925, pt. 1, 1-16, 8 figs.

—— 1926 A

On the mammalian presphenoid and mesethmoid bones.

Proc. Zool. Soc. Lond., 1926, 257-264, 5 figs.

—— 1927 A

Fossil hunting in the South African Karroo.

Nat. Hist., XXVII, 73-76, 3 figs.

——, and S. H. **Haughton** 1913 A

On the skeleton of a new pareiasaurian (*Pareiasuchus peringueyi* g. et sp. nov.).

Ann. S. Afric. Mus., XII, 17-25, pls. iv-v.

—— 1913 B

On a new species of *Scymnognathus* (*S. tigriceps*).

Ann. S. Afric. Mus., XII, 26-35, pl. vi.

—— 1913 C

On two new species of *Dicynodon*.

Ann. S. Afric. Mus., XII, 36-39, pl. vii.

Brower, Charles D. 1911 A

The musk-ox in Alaska.

Bull. Zool. Soc. N. Y., No. xlv, 754-755.

Brown, Arthur Erwin 1878 A

The Sirenia.

Amer. Naturalist, XII, 291-298.

—— 1901 A

On some points in the phylogeny of the Primates.

Proc. Acad. Nat. Sci. Phila., LIII, 119-125.

Abstract in Geol. Centralbl., III, 59.

Brown, Arthur Erwin—Cont'd. 1904 A

Post-glacial nearctic centres of dispersal for reptiles.

Proc. Acad. Nat. Sci. Phila., LVI, 464-474.

—— 1904 B

The zoology of North American big game.

Pages 52-98 in "American Big Game and Its Haunts," by George Bird Grinnell.

Brown, Barnum 1903 A

A new genus of ground sloth from the Pleistocene of Nebraska.

Bull. Amer. Mus. Nat. Hist., XIX, 569-583, pls. 1-li.

Describes *Paramylodon nebrascensis*.

Abstracts in Geol. Centralbl., VI, 54; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 471; Rev. crit. Paléozool., IX, 69; X, 140.

—— 1904 A

Stomach stones and food of plesiosaurs.

Science (n.s.), XX, 184-185.

Abstracts in Geol. Centralbl., VII, 426; Rev. crit. Paléozool., X, 143-144.

—— 1905 A

Recent exploration of a Pleistocene fissure in northern Arkansas.

Science (n.s.), XXI, 300.

—— 1905 B

The osteology of *Champsosaurus* Cope.

Mem. Amer. Mus. Nat. Hist., IX, 1-26, pls. i-iv.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 132; Geol. Centralbl., XI, 474; Sci. Progress, I, 459.

—— 1906 A

New notes on the osteology of *Triceratops*.

Bull. Amer. Mus. Nat. Hist., XXII, 297-300, pl. xl, 2 text-figs.

Brief abstracts in Geol. Centralbl., XI, 475; Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 442.

—— 1907 A

The Hell Creek beds of the Upper Cretaceous of Montana.

Bull. Amer. Mus. Nat. Hist., XXIII, 823-845, 8 text-figs., two maps and lists of fossils found.

Abstracts in Geol. Centralbl., XIV, 326; Amer. Jour. Sci. (4), XXV, 86.

—— 1907 B

Gastroliths.

Science (n.s.), XXV, 392.

Brown, Barnum—Continued 1908 A

The Conrad fissure, a Pleistocene bone deposit in northern Arkansas; with description of two new genera and twenty new species of mammals.

Mem. Amer. Mus. Nat. Hist., New York, IX, 157-208, pls. xiv-xxv, 3 text-figs.

Abstracts in Amer. Naturalist, XLII, 629; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 358-360; Geol. Centralbl., XII, 220; Amer. Jour. Sci. (4), XXVII, 93; Sci. Progress, III, 454, 457.

Review in Rev. crit. Paléozool., XVI, 221.

—— 1908 B

The Ankylosauridæ, a new family of armored dinosaurs from the Upper Cretaceous.

Bull. Amer. Mus. Nat. Hist., XXIV, 187-201, 20 text-figs.

Abstracts in Amer. Jour. Sci. (4), XXV, 528; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 440-441; Geol. Centralbl., XIII, 204; Zeitschr. Indukt. Abstamm. Vererb.-Lehre, II, 1909, 28; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 160; Sci. Progress, III, 461.

—— 1908 C

The *Trachodon* group.

Amer. Mus. Jour., VIII, 51-56, 4 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 145; Geol. Centralbl., XII, 222.

—— 1909 A

Notes on the restorations of the Cretaceous birds *Hesperornis* and *Baptornis.*

Science (n.s.), XXXI, 440.

—— 1910 A

The Cretaceous Ojo Alamo beds of New Mexico with description of the new dinosaur genus *Kritosaurus.*

Bull. Amer. Mus. Nat. Hist., XXVIII, 267-274, pls. xxvii-xxix, 7 text-figs.

Abstracts in Geol. Centralbl., XVII, 323; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 210; Sci. Progress, V, 681.

Review in Rev. crit. Paléozool., XVI, 233.

—— 1911 A

Notes on the restorations of the Cretaceous birds *Hesperornis* and *Baptornis.*

Ann. N. Y. Acad. Sci., XX, 401.

—— 1911 B

Fossil hunting by boat in Canada.

Amer. Mus. Jour., XI, 273-282, 12 figs.

Brown, Barnum—Continued 1912 A

The osteology of the manus in the family Trachodontidæ.

Bull. Amer. Mus. Nat. Hist., XXXI, 105-108, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 525; Geol. Centralbl., XX, 145; Rev. crit. Paléozool., XVII, 74.

—— 1912 B

A crested dinosaur from the Edmonton Cretaceous.

Bull. Amer. Mus. Nat. Hist., XXXI, 131-136, pls. x, xi, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 525; Geol. Centralbl., XX, 146; Rev. crit. Paléozool., XVII, 76.

—— 1912 C

Brachyostracon, a new genus of glyptodonts from Mexico.

Bull. Amer. Mus. Nat. Hist., XXXI, 167-177, pls. xiii-xviii, 4 text-figs.

Abstracts in Sci. Progress, VIII, 10; Geol. Centralbl., XX, 145.

—— 1912 D

Fossil hunting by boat in Canada.

Scient. Amer. Suppl., LXXIII, 82.

—— 1913 A

The skeleton of *Saurolophus,* a crested duck-billed dinosaur from the Edmonton Cretaceous.

Bull. Amer. Mus. Nat. Hist., XXXII, 387-393, pls. lxii, lxiii, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 336; Sci. Progress, VIII, 639; Rev. crit. Paléozool., XVIII, 54; Geol. Zentralbl., XXI, 265; Nature, XCII, 514.

—— 1913 B

A new trachodont dinosaur, *Hypacrosaurus,* from the Edmonton Cretaceous of Alberta.

Bull. Amer. Mus. Nat. Hist., XXXII, 395-406, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 336; Sci. Progress, VIII, 639; Rev. crit. Paléozool., XVIII, 53; Geol. Zentralbl., XXI, 265.

—— 1913 C

A new plesiosaur, *Leurospondylus,* from the Edmonton Cretaceous of Alberta.

Bull. Amer. Mus. Nat. Hist., XXXII, 605-615, 7 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 510-511; Rev. crit. Paléozool., XXI, 52; Geol. Zentralbl., XXI, 264; Nature, XCII, 563.

Brown, Barnum—Continued 1913 D

A new crested dinosaur.

Amer. Mus. Jour., XIII, 138-144, 7 plates.
Abstract in Nature, XCI, 326.

—— 1913 E

The manus of trachodont dinosaurs.

Science (n.s.), XXXVIII, 926-927.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 508; Jahresber. Anht. Entwickl. (N.F.), XIX, pt. 3, 145.

—— 1914 A

Anchiceratops, a new genus of horned dinosaurs from the Edmonton Cretaceous of Alberta. With discussion of the origin of the ceratopsian crest and the brain casts of *Anchiceratops* and *Trachodon*.

Bull. Amer. Mus. Nat. Hist., XXXIII, 539-548, pls. xxix-xxxvii, 1 text-fig.
Abstracts in Rev. crit. Paléozool., XIX, 102; XXI, 53; Geol. Zentralbl., XXVIII, 446.

—— 1914 B

A complete skull of *Monoclonius*, from the Belly River Cretaceous of Alberta.

Bull. Amer. Mus. Nat. Hist., XXXIII, 549-558, pls. xxxviii-xl, 2 text-figs.
Abstract in Rev. crit. Paléozool., XIX, 102; XX, 140; Geol. Zentralbl., XXVIII, 445.

—— 1914 C

Corythosaurus casuarius, a new crested dinosaur from the Belly River Cretaceous, with provisional classification of the family Trachodontidæ.

Bull. Amer. Mus. Nat. Hist., XXXIII, 559-565; pl. xli.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1919, Ref., 356; Rev. crit. Paléozool., XIX, 102; XX, 138-139; Geol. Zentralbl., XXVIII, 445; Nature, XCIV, 492, fig.

—— 1914 D

Leptoceratops, a new genus of *Ceratopsia* from the Edmonton Cretaceous of Alberta.

Bull. Amer. Mus. Nat. Hist., XXXIII, 567-580, pl. xlii, 19 text-figs.
Abstracts in Rev. crit. Paleozool., XIX, 102; XX, 139; Neues Jahrb. Min. Geol. Pal., 1920, I, Ref., 247; Geol. Zentralbl., XXVIII, 376.

—— 1914 E

Cretaceous-Eocene correlation in New Mexico, Wyoming, Montana, Alberta.

Bull. Geol. Soc. Amer., XXV, 355-380, 2 text-figs.
Abstract in Rev. crit. Paléozool., XX. 37.

Brown, Barnum—Continued 1915 A

Tyrannosaurus, the largest flesh-eating animal that ever lived.

Amer. Mus. Jour., XV, 271-280, 5 plates. 2 figures.

—— 1915 B

Fossil hunting by boat in Canada.

Handbook series No. 5, Amer. Mus. Nat. Hist., New York, 152-159, figs. 47, 48.

—— 1915 C

Tyrannosaurus, a Cretaceous carnivorous dinosaur.

Scient. Amer., CXIII, 322-323, 6 figs.
Abstract in Nature, XCVI, 326.

—— 1916 A

A new crested trachodont dinosaur Prosaurolophus maximus.

Bull. Amer. Mus. Nat. Hist., XXXV, 701-708, 5 text-figs.
Abstracts in Rev. crit. Paléozool., XXI, 55; Neues Jahrb. Min. Geol. Pal., 1920, I, Ref., 246.

—— 1916 B

Corythosaurus casuarius: Skeleton, musculature and epidermis.

Bull. Amer. Mus. Nat. Hist., XXXV, 709-716, pls. xiii-xxii.
Abstracts in Rev. crit. Paléozool., XXI, 55; Nature, XCVIII, 356; Neues Jahrb. Min. Geol. Pal., 1919, Ref., 356.

—— 1917 A

A complete skeleton of the horned dinosaur *Monoclonius*, and description of a second skeleton showing skin impressions.

Bull. Amer. Mus. Nat. Hist., XXXVII, 281-306, pls. xi-xix, 4 text-figs.
Abstracts in Rev. crit. Paléozool., XXIV, 146-147; Geol. Zentralbl., XXVIII, 534; Sci. Progress, XII, 425.

—— 1917 B

Monoclonius, a Cretaceous horned dinosaur.

Amer. Mus. Jour., XVII, 135-140, 4 illust.

—— 1919 A

Hunting big game of other days. A boating expedition in search of fossils in Alberta, Canada.

Nat. Geogr. Mag., XXXV, 407-429, 25 illustrations.

—— 1920 A

Note on scapula of an armored dinosaur.

U. S. Geol. Surv. Profess. Pap., CXIX, 65.

——. See also **Brown** and **Matthew**; **Brown** and **Osborn**.

Brown, J. S. 1904 A
Mammoth tooth [found at Austin, Texas.]
Scient. Amer., xc, 119.

Brown, Robert 1868 A
Notes on the history and geographical relations of the Cetacea frequenting Davis Strait and Baffin's Bay.
Proc. Zool. Soc. Lond., 1868, 533-556.

Bru, Jean-Baptiste 1804 A
Description des os du *Megatherium*, faite en montant le squelette.
Ann. Mus. hist. nat. Paris, v, 387-400, pls. xxiv, xxv.
An abridged translation made by Bonp'and. A description of the South American species.

Brubacher, H. 1892 A
Uebermässiges, ungewöhnliches Wachsthum der Schneidezähne bei Nagethieren.
Deutsche Monatsschr. Zahnheilk., x, 1-5, 4 figs.
There is a bibliography of 13 titles.

Bruch, C. 1853 A
Ueber die Entwickelung der Clavicula und die Farbe des Blutes.
Zeitschr. wiss. Zool., iv, 371-376.

——— 1862 A
Vergleichung des Schädels mit der Wirbelsäule des Lachses, mit einer Aufzählung sämmtlicher Skelettheile desselben nach der Art ihrer Zusammensetzung.
Abh. Senckenb. naturf. Ges., iv, 73-130, 10 text-figs.

Bruch, Phil. 1853 A
Monographische Uebersicht der Gattung *Larus* Lin.
Jour. Ornith., i, 96-108.

Brühl, Carl Bernhard 1862 A
Icones ad zootomiam illustrandam: Das Skelet der Crocodile dargestellt in 20 Tafeln.
Folio, Vienna, 1862.

Bruni, Angelo Cesare 1910 A
Sui primi stadi di sviluppo della colonna vertebrale dei Rettili e degli Uccelli.
Atti Accad. Sci. Torino, xlv, 750-757, 1 pl.

Brunner, Josef 1904 A
The vanishing beaver, the original woodcutter, engineer and irrigator.
Country Life in America, v, 476-481, 523-526, 18 text-figs.

Brunner, Josef—Continued 1905 A
The devastating squirrel. Some evidence that he is an enemy of the forest, since he destroys the birds that would keep down harmful insects.
Country Life in America, vii, 264-269, 9 text-figs.

Bruyère, Henri 1901 A
Le *Ceratodus*.
La Nature, xxix, 89-91, 1 text-fig.

Bryan, Kirk 1923 A
Erosion and sedimentation in the Papago Country, Arizona.
Bull. U. S. Geol. Surv., dccxxx, 19-90, map, pls. x-xviii, 25 text-figs.

——— 1927 A
The "Palouse soil" problem, with an account of elephant remains in wind-borne soil on the Columbia Plateau of Washington.
Bull. U. S. Geol. Surv., dccxc, 19-45, pls. iv-vii.

———, and **J. W. Gidley** 1926 A
Vertebrate fossils and their enclosing deposits from the shores of Pleistocene Lake Cochise, Arizona.
Amer. Jour. Sci. (5), xi, 477-488, 2 figs.

Bryan, William Alanson 1927 A
A Pleistocene park in the making.
Mus. Graphic, i, 77-82, with figs.

Bryant, Harold C. 1914 A
Teeth of a cestraciont shark from the Upper Triassic of northern California.
Bull. Dept. Geol., Univ. Calif., viii, 27-30, 2 text-figs.
Abstracts in Geol. Zentralbl., xxi, 623; xxix, 477.

——— 1914 B
Vertebrate fauna of the Triassic limestones at Cow Creek, Shasta County, California.
Bull. Geol. Soc. Amer., xxv, 155 (abstract).

Bryant, William L. 1916 A
The restoration of *Dinichthys magnificus* Hussakof and Bryant.
Buffalo Soc. Nat. Sci. A brochure without title, 9-11, 1 plate.

——— 1919 A
On the structure of *Eusthenopteron*.
Bull. Buffalo Soc. Nat. Sci., xiii, 1-23, pls. i-xviii, 8 text-figs.
Noticed in Amer. Jour. Sci. (4), l, 240.

——— 1924 A
A new species of *Bothriolepis* from the Upper Devonian of Canada.
Bull. Buffalo Soc. Nat. Sci., xiii, No. 3, 54-55, pls. i, ii.

Bryant, William L.—Continued 1926 A

Evidence of the presence of chordates in the Cambrian.

Bull. Geol. Soc. Amer., XXXVII, 236 (abstract).

——— 1926 B

On the structure of *Palæaspis* and on the occurrence in the United States of fossil fishes belonging to the family Pteraspidæ.

Proc. Amer. Philos. Soc., LXV, 256-271, pls. i-iii, 3 text-figs.

———. See **Hussakof** and **Bryant**.

Buckland, Francis Trevelyan 1838 A

On fossil remains of *Megatherium*.

Rep. Brit. Assoc. Adv. Sci., 1st and 2d Meet., 1837 (1838), 104-107.

Abstract in Neues Jahrb. Min. Geogr. Geol. Jahrg., 1834, Ref., 112-113.

Buckley, E. C. 1903 A

Distribution of mastodon remains in Wisconsin.

Science (n.s.), XVII, 297.

Buckley, S. B. 1866 A

A preliminary report of the geological and agricultural survey of Texas, Austin, 1866.

Pages 1-81, with appendix, pages 1-4.

——— 1874 A

First annual report of the Geological and Agricultural survey of Texas, Houston, 1874.

Pages 1-142.

——— 1876 A

Second annual report of the geological and agricultural survey of Texas, Houston, 1876.

Pages 1-96.

Bugnion, E. 1901 A

L'articulation de l'epaule chez les animaux et chez l'homme.

C. R. Assoc. Anatomistes, Lyons, III, 93-104, figs. 1, 2.

Buist, T. P. 1912 A

On the development of the pectoral girdle in the pipefish (*Syngnathus acus*).

Ann. Mag. Nat. Hist. (8), X, 613-621, pls. xiii.

Bulman, O. M. B., and W. F. **Whittard** 1926 A

On *Branchiosaurus* and allied genera (Amphibia).

Proc. Zool. Soc. Lond., 1926, 533-579, pls. i-iii, 15 text-figs.

The synonymy and literature are cited under the various species.

Burckhardt, R. 1902 A

Das Problem des antarktischen Schöpfungscentrums vom Standpunkt der Ornithologie.

Zool. Jahrb. Syst., XV, 499-536.

See Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 338-339.

——— 1903 A

IV. Skeletsystem. D: Palaeontologisches.

Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 77-129.

On pages 77-84 is a list of papers, abstracts of most of which are presented on the succeeding pages.

——— 1905 A

Spezielle Anatomie und Entwicklungsgeschichte des Menschen und der Wirbeltiere. IV. Skeletsystem. D: Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), X, Abt. 3, 145-187.

On pages 145-153 is a list of the papers, abstracts of which are presented on the succeeding pages.

——— 1906 A

Skeletsystem. Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), XI, pt 3, 149-185.

On pages 149-154 are listed titles of 137 papers, résumés of some of which are presented on the succeeding pages.

Burden, Douglas 1927 A

The quest for the dragon of Komodo.

Nat. Hist., XXVII, 3-18, 20 figs.

Burlet, H. M. de 1913 A

Zur Entwicklungsgeschichte des Walschädels. I: Über das Primordialcranium eines Embryo von *Phocæna communis*.

Morphol. Jahrb., XLV, 523-556, pls. xv-xvii, 24 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 46-49.

——— 1913 B

Über einen rudimentären Wirbelkörper an der Spitze des Dens epistrophei bei einem Embryo von *Bradypus cuculli*.

Morphol. Jahrb., XLV, 393-408, 12 figs.

The bibliography includes 40 titles.

Burlet, H. M. de—Continued 1913 C

Zur Entwicklungsgeschichte des Walschädels. II: Das Primordialcranium eines Embryo von *Phocæna communis* von 92 mm.

Morphol. Jahrb., XLVII, 645-676, 2 pls., 25 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 46-49.

—— 1914 A

Zur Entwicklungsgeschichte des Walschädels. III: Das Primordialcranium eines Embryo von *Balænoptera rostrata* (105 mm.).

Morphol. Jahrb., XLIX, 119-178, pls. i-vii, 33 text-figs.

For No. I, see vol. XLV; for No. 2, vol. XLVII.

—— 1914 B

Zur Entwicklungsgeschichte des Walschädels. IV: Über das Primordialcranium eines Embryo von *Lagenorhynchus albirostris*.

Morphol. Jahrb., XLIX, 393-406, 9 text-figs.

—— 1916 A

Zur Entwicklung des Walschädels. V: Zusammenfassung des über den Knorpelschädel der Wale Mitgeteilten.

Morphol. Jahrb., L, 1-18, 7 figs.

—— 1917 A

Beiträge zur Entwicklungsgeschichte der Wirbelsäule der Cetaceen.

Morphol. Jahrb., L, 373-402, 19 figs.

The bibliography includes 22 titles.

Burmeister, H. 1868 A

Mammifera pinnata Argentina.

An. Mus. Nac. Buenos Aires, I, 301-366, pls. xv-xx.

Presents a detailed description of *Epiodon australe*.

—— 1868 B

Erwiderung auf die briefliche Mittheilung des Herrn Dr. J. Reinhardt, die Hautbedeckung der Gravigraden betreffend.

Arch. Anat. Physiol. Med., 1868, 759-762.

—— 1868 C

Bericht über ein Skelet von *Machaerodus*, im Staats-Museum zu Buenos Aires.

Abh. naturf. Ges. Halle, X, 181-196, 1 pl.

The animal is now known as *Smilodon neogæus*.

Burmeister, H.—Continued 1869 A

Descripcion de cuatro especies de delfinides de la costa Argentina en el Oceano Atlantico.

An. Mus. Nac. Buenos Aires, I, 367-470, pls. xxi-xxviii.

—— 1881 A

Bericht über ein Skelet von *Scelidotherium leptocephalum*.

Monatsber. Akad. Wiss. Berlin, 1881, 374-381, 1 plate.

—— 1885 A

Berichtigung zu *Cœlodon*.

Sitz.-Ber. Akad. Wiss. Berlin, 1885, II, 567-573, pl. v.

—— 1886 A

Weitere Bemerkungen über *Cœlodon*.

Sitz.-Ber. Akad. Wiss. Berlin, 1886, I, 357-358.

—— 1886 B

Nachmalige Berichtigung zu *Cœlodon*.

Sitz.-Ber. Akad. Wiss. Berlin, 1886, II, 1127-1132, 1 fig.

—— 1886 C

Osteologie der Gravigraden oder Riesen-Faulthiere.

In "Description physique de la République Argentine"; Atlas, section ii (Mammifères), livr. 3, 67-125, pls.

—— 1887 A

Neue Beobachtungen an *Cœlodon*.

Sitz.-Ber. Akad. Wiss. Berlin, 1887, II, 857-862, 2 figs.

Burne, R. H. 1891 A

On the variation and development of the leporine sternum.

Proc. Zool. Soc. Lond., 1891, 159-164, 5 figs.

—— 1905 A

Notes on the muscular and visceral anatomy of the leathery turtle (*Dermochelys coriacea*).

Proc. Zool. Soc. Lond., 1905, I, 291-324, text-figs. 55-73.

Burnett, Gilbert T. 1828 A

Illustrations of the Manupeda, or apes and their allies; being the arrangement of the Quadrumana or anthropomorphous beasts indicated in outline.

Quart. Jour. Sci. Lit. Art., XXVI, 301-307.

Burroughs, J. 1919 A

A question for the palæontologist on evolution.

Nat. Hist., XIX, 491.

See Matthew, W. D., 1919 A.

Bush, Lucy P. 1903 A

Note on the dates of publication of certain genera of fossil vertebrates.

Amer. Jour. Sci. (4), xvi, 96-98.

Abstract in Geol. Centralbl., v, 40.

Busk, George 1866 A

Remarks on the cranial and dental characters of the existing species of *Hyæna*.

Jour. Linn. Soc. Zool., ix, 59-79, pl. ii.

Butterworth, Emerson M. 1916 A

A new mustelid from the Thousand Creek Pliocene of Nevada.

Bull. Dept. Geol., Univ. Calif., x, 21-24, 1 text-fig.

Abstract in Rev. crit. Paléozool., xxi, 87; Geol. Zentralbl., xxix, 473.

Butts, Charles 1903 A

Fossil faunas of the Olean quadrangle.

Bull. N. Y. State Mus., No. 69 (Paleont. 9), 990-995.

Buwalda, John P. 1914 A

Pleistocene beds at Manix in the eastern Mohave Desert region.

Bull. Dept. Geol. Univ. Calif., vii, 443-464, pls. xxii-xxv.

—— 1914 B

A proboscidean tooth from the Truckee beds of western Nevada.

Bull. Dept. Geol. Univ. Calif., viii, 305-308, 1 text-fig.

Describes a fragment of a tooth identified as *Tetrabelodon?*

Abstracts in Rev. crit. Paléozool., xx, 42; Geol. Zentralbl., xxix, 475.

—— 1914 C

Tertiary mammal beds of Stewart and Ione Valleys in west-central Nevada.

Bull. Dept. Geol. Univ. Calif., viii, 335-363, pls. xxxii-xxxviii, 2 maps.

—— 1916 A

New mammalian faunas from Miocene sediments near Tehachapi Pass in the southern Sierra Nevada.

Bull. Dept. Geol., Univ. Calif., x, 75-85.

Abstracts in Rev. crit. Paléozool., xxi, 85; Geol. Zentralbl., xxix, 445.

—— 1916 B

New Miocene mammalian fauna from the Tehachapi region (abstract).

Bull. Geol. Soc. Amer., xxvii, 170.

—— 1924 A

The age of the Payette formation and the old erosion surface in Idaho.

Science (n.s.), lx, 572-573.

"C. D." 1838 A

Bones of the mammoth.

Amer. Jour. Sci., xxxiii, 201.

Refers to finding of bones of mammoth in Rochester, New York.

Cabrera, Angel 1926 A

Sobre la alimentación del megaterio.

Bol. Soc. Espan Hist. Nat., xxvii, 388-391.

—— 1926 B

Crétáceos fósiles del Museo de la Plata.

Rev. Mus. La Plata, xxix, 363-411, 19 figs.

The bibliography embraces 48 titles.

Cahall, W. C. 1890 A

The teeth as evidence of evolution.

Amer. Naturalist, xxiv, 224-236.

Cahn, Alvin R. 1922 A

Chlamytherium septentrionalis, a fossil edentate new to the fauna of Texas.

Jour. Mamm., iii, 22-24, pls. ii, iii.

Call, R. Ellsworth 1889 A

Supposed mastodon found at Helena, Ark.

Rep. Geol. Surv. Ark., ii, 39.

Callender, George 1868 A

The formation and early growth of the bones of the human face.

Proc. Roy. Soc. Lond., xvi, 447-449.

Calvin, Samuel 1897 A

Pleistocene of Iowa.

Ann. Iowa, iii, 1-22, 3 plates and portrait of author.

—— 1897 B

The State Quarry limestone.

Proc. Iowa Acad. Sci., iv, 16-21.

—— 1901 A

Geology of Page County (Iowa).

Iowa Geol. Surv., xi, 399-460, with map.

—— 1909 A

Present phase of the Pleistocene problem in Iowa.

Bull. Geol. Soc. Amer., xx, 133-152, pls. i-v.

—— 1909 B

Aftonian mammalian fauna.

Bull. Geol. Soc. Amer., xx, 341-356, pls. xvi-xxvii.

For discussion of Aftonian sands and gravels see B. Shimek's paper, same volume, 399-408.

—— 1910 A

Administrative report.

Iowa Geol. Surv., xx, xi-xv.

Calvin, Samuel—Continued 1911 A
Aftonian mammalian fauna, II.
Bull. Geol. Soc. Amer., XXII, 207-216, pls. 18-24.
Abstract in Geol. Centralbl., XVIII, 521.

Camerano, L. 1915 A
Contributo allo studio dei wormiani palato palatini e dei wormiani medio palatini di Calori nei mammiferi.
Boll. Mus. Zool. Anat. Torino, XXX, No. 706, 1-8, pls. i-iv.

—— 1915 B
Osservazioni intorno alla bipartizione del lacrimale nei mammiferi ungulati artiodattili.
Boll. Mus. Zool. Anat. Torino, XXX, No. 707, 1-7, pls. i-iv.

—— 1916 A
Materiali per lo studio della partizione del nasale nei mammiferi ungulati artiodattili e nei carnivori.
Boll. Mus. Zool. Anat. Torino, XXXI, No. 709, 1-4, pls. i-iii.

—— 1916 B
Ricerche intorno all' "os supramaxilare accessorium" di Vrolik, alla partizione dell' intermascellare, e sulle ossificazioni che si trovano nella fontanella maxillo nasale dei mammiferi ungulati artiodattili e in alcuni carnivori.
Boll. Mus. Zool. Anat. Torino, XXXI, No. 710, 1-16, pls. i-vii.

Cameron, Allan Gordon 1910 A
The scent glands of ruminants.
Field, London, CXVI, 51.
Discusses also the classification of deer by their antlers.

—— 1910 B
Antlers and the classification of deer.
Field, London, CXVI, 154, 215.

Camp, Charles Lewis 1917 A
An extinct toad from Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., X, 287-292, 3 text-figs.
Abstracts in Rev. crit. Paléozool., XXII, 59; Geol. Zentralbl., XXIX, 477.

—— 1918 A
Excavations of burrows of the rodent *Aplodontia,* with observations on the habits of the animal.
Univ. Calif. Publ. Zool., XVII, 517-536, 6 figs.

Camp, Charles Lewis—Continued 1923 A
Classification of the lizards.
Bull. Amer. Mus. Nat. Hist., XLVIII, 289-481, 112 figs.
The bibliography occupies pages 422-435.

—— See **Gregory,** W. K., and C. L. **Camp**

Campbell, George Douglas (Duke of Argyll) 1883 A
Prehistoric giants.
Nature, XXVII, 578-579.
Discusses Carson City, Nevada, footprints.

Campbell, M. R. 1915 A
Guidebook of the western United States. Part A: the Northern Pacific route with a side trip to Yellowstone Park.
Bull. U. S. Geol. Surv., DCXI, 1-212, 27 sheets, xxvii pls., 38 figs.
Abstract in Jour. Wash. Acad. Sci., V, 579-580.

Camper, Adrien 1812 A
Mémoire sur quelques parties moins connues du squelette des sauriens fossiles.
Ann. Mus. hist. nat. Paris, XIX, 215-241, pls. i-iii.

Camper, Peter 1780 A
Comparatio dentium hippopotami et animalis Canadensis.
Acta Acad. Sci. Petropol. for 1777, pt. ii, 219-222.

Canavari, Mario 1916 A
Discrizione di un notevole esamplare di *Ptychodus,* Agassiz.
Palæont. ital., XXII, 35-102, pls. v-xiv.
Abstract in Geol. Mag. (6), IV, 224.

Canestrelli, G. 1910 A
Denti di *Ptychodus* Agass. nel Terziario dell' Appennino Tosco-Emiliano.
Atti Soc. Toscana Sci. Nat. Mem., XXVI, 102-120, pl. xi.
Abstract in Geol. Centralbl., XVIII, 236.

Cannon, George L. 1888 B
The Quaternary of the Denver Basin.
Proc. Colorado Sci. Soc., III, 48-70.

—— 1890 B
Notes on the geology of Perry Park, Colorado.
Proc. Colorado Sci. Soc., III, 308-315.

—— 1894 A
The geology of Denver and vicinity.
Proc. Colorado Sci. Soc., IV, 235-270.

Cannon, George L.—Continued 1894 B
Notes on the geology of Palmer Lake, Colo., and the Palæozoic exposures along the Front Range.
Proc. Colorado Sci. Soc., IV, 224-234, one map.

—— 1906 A
Sauropodan gastroliths.
Science (n.s.), XXIV, 116.

—— 1906 B
Notes on some fossils recently discovered near Denver, Colorado.
Proc. Col. Sci. Soc., VIII, 194-198, 1 fig.

Cantwell, J. C. 1884 A
Exploration of the Kowak River.
Science (1), IV, 551-554.
Abstract furnished by Maj. E. W. Clark.

—— 1887 A
Exploration of the Kowak River, Alaska.
Capt. M. A. Healy's "Report of the cruise of the Revenue Marine Steamer *Corwin* in the Arctic Ocean in the year 1885," 25-52.

Capellini, G. 1881 A
Avanzi di squalodonte nella molassa marnosa miocenica del Bolognese.
Mem. Accad. Sci. Bologna (4), II, 413-419, with pl.

—— 1885 A
Del zifioide fossile (*Choneziphius planirostris*) scoperto nelle sabbie plioceniche di Fangonero presso Siena.
Atti Accad. Lincei. Mem., I, 18-28, with pl.

—— 1885 B
Resti fossili di *Dioplodon* e *Mesoplodon.*
Mem. Accad. Sci. Bologna (4), VI, 291-306, pl. 1.

—— 1886 A
Sopra resti di un sirenio fossile (*Metaxytherium lovisati;* Cap.) raccolti a Monta Fiocca presso Sassari in Sardegna.
Mem. Accad. Sci. Bologna (4), VII, 39-53, with pl.

—— 1887 A
Delfinorinco fossile dei Dintorni di Sassari.
Mem. Accad. Sci. Bologna (4), VIII, 103-110, with pl.

—— 1890 A
Sul coccodrilliano garialoide (*Tomistoma calaritanus*) scoperto nella collina di Cagliari nel MDCCCLXVIII.
Mem. Accad. Lincei. (4) VI, 507-533, pls. i-iv.

Capellini, G.—Continued 1907 A
Mastodonti del Museo Geologico di Bologna.
Mem. Accad. Sci. Bologna (6), IV, 127-145.

Capitan, L. 1901 A
La polydactylie et son interpretation.
La Nature, No. 1465, 51-54.

——, and H. **Breuil** 1901 A
Reproductions de dessins paléolitiques gravées sur les parois de la grotte des Combarelles.
C. R. Acad. Sci. Paris, CXXXI, 1038-1043, 4 text-figs.

Capps, S. R. 1907 A
The girdles and hind limb of *Holosaurus abruptus* Marsh.
Jour. Geol., XV, 350-356, 3 text-figs.
Abstracts in Geol. Centralbl., XII, 387-388; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 441; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 171.

Cardoso, Aníbal 1912 A
Antigüedad del caballo en el Plata.
An. Mus. Nac. Buenos Aires (4), XV, 371-439, 16 text-figs.

Carlet, G. 1878 A
Mémoire sur les écailles des poissons téléostéens.
Ann. Sci. nat. (6), VIII, art. 8, 1-19, 5 text-figs.
Abstract by author in C. R. Acad. Sci. Paris, CXXXVIII, 396.

Carlin, William E. 1881 A
Observations on *Siredon lichinoides.*
Proc. U. S. Nat. Mus., IV, 120-121.
Reprint in Ann. Mag. Nat. Hist. (5), VIII, 235-236.

Carll, John F. 1880 A
Geology of the oil regions of Warren, Venango, Clarion, and Butler Counties.
Geol. Surv. Penn. (2d), III, i-xxiv+1-482 pages, with maps and text-figs.

Carlsson, Albertina 1886 A
Untersuchungen über Gliedmassenreste bei Schlangen.
Bihang svenska Vet. Akad. Hand., XI, No. 11, 1-38, pls. i-iii.

—— 1894 A
Ueber die Zahnentwicklung bei einigen Knochenfischen.
Zool. Jahrb. Anat., VIII, 217-244, pl. xii, 2 text-figs.

Carlsson, Albertina—Continued 1896 A
Ueber den Zahnersatz bei *Agama colonorum.*
Anat. Anz., XI, 758-766, 7 figs.
There is a bibliography of 11 titles.

—— 1914 A
On the fossil carnivores *Cynodictis intermedius* and *Cynodon gracilis* from the phosphorites of Quercy.
Proc. Zool. Soc. Lond., 1914, 227-230, pl. i.

—— 1921 A
Einige Bemerkungen betreffs H. Pohle's Aufsatz "Zur Kenntniss der Raubtiere. II: Die Stellung der Gattungen *Amphictis* und *Nandinia.*"
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1921, pp. 70-75.
The bibliography comprises 14 titles.

—— 1922 A
Über die Tupaiidæ und ihre Beziehungen zu den Insectivora und den Prosimiæ.
Actá. Zool., III, 227-270, 31 figs.
The bibliography contains 53 titles.

Carman, J. Ernest 1917 A
The Pleistocene geology of northwestern Iowa.
Iowa Geol. Surv., XXVI, 233-445, pls. xvi-xxv, text-figs. 25-63.

Carnot, Ad. 1892 A
Recherche du fluor dans les os modernes et les os fossiles.
C. R. Acad. Sci. Paris, CXIV, 1189-1192.

Carpenter, Frank R. 1888 A
Notes on the geology of the Black Hills.
South Dakota School of Mines, Preliminary Report; 11-13, Rapid City.

Carpenter, William M. 1842 A
Notice of an interesting fossil.
Amer. Jour. Sci. (1), XLII, 390-391, 1 fig.
Describes tooth of tapir from Opelousas, Louisiana.

Carruccio, A. 1913 A
"*Taurotragus oryx*" Pall. e sua armatura scheletrica.
Boll. Soc. zoöl. Ital. (3), II, 77-83.

—— 1913 B
Cenni sull' os penialis dell' *Ursus americanus* e dell' *Histrix cristata.*
Boll. Soc. zool. Ital. (3), II, 174-178.

—— 1913 C
Dimensioni insolite e non ancora registrate di una *Thalassochelis carretta* del Golfo di Teulada, e confronto con più individui pescati in altri mari.
Boll. Soc. zool. Ital. (3), II, 179-185.

Carter, James Thornton 1905 A
The evolution of the vertebrate skull, with special references to the development and suspension of the jaws.
Trans. Odont. Soc. G. Brit., XXXVII, 125-150, 9 figs.

—— 1919 A
On the occurrence of denticles on the snout of *Xiphias gladius.*
Proc. Zool. Soc. Lond., 1919, 321-326, 3 pls.

—— 1922 A
On the structure of the enamel of the Primates and some other mammals.
Proc. Zool. Soc. Lond., 1922, 599-608, pls. i-vii.

Cartier, Oscar 1874 A
Studien über den feinen Bau der Haut bei den Reptilien.
Verh. phys.-med. Ges. Würzb. (N.F.), V, 192-211, pl. iii.

—— 1875 A
Beiträge zur Entwickelungsgeschichte der Wirbelsäule.
Zeitschr. wiss. Zool., XXV, Suppl., 65-76, pl. iv.

Carus, J. V. 1875 A
Handbuch der Zoologie. 1ster Bd. Wirbelthiere, Mollusken und Molluscoiden.
8vo., Leipzig, 1868-1875, i-ix+1-894 pages.

——, and W. **Engelmann** 1861 A
Bibliotheca Zoologica. Verzeichniss der Schriften über Zoologie, welche in den periodischen Werken enthalten und vom Jahre 1846-1860 selbständig erschienen sind. Mit Einschluss der allgemeinen naturgeschichtlichen, periodischen und palaeontologischen Schriften.
8vo., Leipzig, 2ter Bd., i-xxiv+951-2144 pages.

Case, E. C. 1896 A
Abnormal sacrum in an alligator.
Amer. Naturalist, XXX, 232-234, 2 figs.

—— 1897 C
The cranial region of *Dimetrodon.*
Science (n.s.), V, 594.

—— 1897 D
Review of O. C. Marsh's, The dinosaurs of North America.
Jour. Geol., V, 87-88.

Case, E. C.—Continued 1898 C

The development and geological relation of the vertebrates. Part III: Reptilia (continued from 1898 B); Part IV: Aves; Part V: Mammalia.

Jour. Geol., VI, 622-646, 711-736 (Reptilia); 816-820 (Aves); 820-839 (Mammalia).

—— 1899 B

The development and geological relations of the vertebrates. Part V: Mammalia (continued).

Jour. Geol., VII, 163-187.

—— 1900 A

The vertebrates from the Permian bone bed of Vermilion County, Illinois.

Jour. Geol., VIII, 698-729, pls. i-v. (Reprint, 1-29, pls.)

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 315-316; Rev. crit. Paléozool., VI, 179; Geol. Centralbl., II, 121.

—— 1901 A

[The Eocene reptiles of Maryland.]

Maryland Geol. Surv., Eocene volume, 95-98, pls. x, xi.

Abstract in Geol. Centralbl., II, 764.

—— 1902 A

Palæontological notes.

Contrib. Walker Mus. I, 45-50, pls. ix, x.

Abstracts in Geol. Centralbl., X, 371; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 143.

—— 1902 B

On some vertebrate fossils from the Permian Beds of Oklahoma.

Rep. Geol. Nat. Hist. Surv. Okla., II, 62-68.

Abstract in Geol. Centralbl., 723.

—— 1902 C

Palæontological notes.

Jour. Geol., X, 256-261, pls. i, ii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 140; Geol. Centralbl., X, 371.

—— 1903 A

The structure and relationship of the American *Pelycosauria*.

Amer. Naturalist, XXXVII, 85-102, 10 figs.

Abstract in Geol. Centralbl., V, 42.

—— 1903 B

The osteology of *Embolophorus dollovianus* Cope, with an attempted restoration.

Jour. Geol., XI, 1-28, figs. 1-23.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 139; Geol. Centralbl., V, 40; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 162.

Case, E. C.—Continued 1903 C

New or little known vertebrates from the Permian of Texas.

Jour. Geol., XI, 394-402, figs. 1-10.

Abstracts in Geol. Centralbl., IV, 723; V, 40; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 138; Geol. Centralbl., V, 40.

—— 1904 A

The osteology of the skull of the pelycosaurian genus *Dimetrodon*.

Jour. Geol., XII, 304-311, figs. 1-6.

Abstracts in Geol. Centralbl., V, 635; X, 426.

—— 1904 B

On the structure of the fore foot of *Dimetrodon*.

Jour. Geol., XII, 312-315, figs. 1-3.

Abstract in Geol. Centralbl., V, 635.

—— 1904 C

A remarkably preserved specimen of a pelycosaur collected during the last summer in Texas.

Science (n.s.), XIX, 253.

Abstract in Geol. Centralbl., X, 372.

—— 1904 D

Mammalia, Aves, Reptilia [of Miocene of Maryland].

Maryland Geol. Surv. Miocene volume, 1-70, pls. x-xxvii.

The plates are bound separately.

—— 1905 A

Characters of the Chelydosauria.

Science (n.s.), XXI, 298.

—— 1905 B

The osteology of the Diadectidæ and their relations to the Chelydosauria.

Jour. Geol., XIII, 126-159, 20 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 314-315.

—— 1905 C

The morphology of the skull of the pelycosaurian genus *Dimetrodon*.

Trans. Amer. Philos. Soc. (n.s.), XXI, 5-29, pls. i-vii, figs. 1-8.

Abstracts in Geol. Centralbl., 567; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 166-167; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 314; Rev. crit. Paléozool., X, 20-21.

—— 1905 D

Bathygnathus borealis Leidy, and the Permian of Prince Edward Island.

Science (n.s.), XXII, 52-53.

—— 1905 E

Œcological features of evolution.

Bull. Wis. Nat. Hist. Soc. (n.s.), III, 169-180.

Case, E. C.—Continued 1906 A

On the skull of *Edaphosaurus pogonias* Cope.

Bull. Amer. Mus. Nat. Hist., XXII, 19-26, plate vii, figs. 1-7.

Abstracts in Geol. Centralbl., VIII, 159; Rev. crit. Paléozool., XI, 153; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 161.

—— 1907 A

Description of the skull of *Bolosaurus striatus* Cope.

Bull. Amer. Mus. Nat. Hist., XXIII, 653-658, pl. xlviii, text-figs. 1-5.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 286-287; Geol. Centralbl., X, 425; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 42; Sci. Progress, II, 521.

—— 1907 B

The character of the Wichita and Clear Fork divisions of the Permian Red Beds of Texas.

Bull. Amer. Mus. Nat. Hist. XXIII, 659-664, 1 fig.

For a summary see Neues Jahrb. Min. Geol. Pal., 1908 I, 256-259. Abstract in Geol. Centralbl., X, 421.

—— 1907 C

Additional description of the genus *Zatrachis* Cope.

Bull. Amer. Mus. Nat. Hist., XXIII, 665-668, figs. 1-6.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 287-288; Geol. Centralbl., X, 424.

—— 1907 D

Restoration of *Diadectes*.

Jour. Geol., XV, 556-559, figs. 1, 2.

Abstracts in Geol. Centralbl., X, 372; XII, 222.

—— 1907 E

Revision of the Pelycosauria of North America.

Publ. Carnegie Instn., Wash., No. LV, pp. 1-176, pls. i-xxxv, text-figs. 1-75.

Résumé in Neues Jahrb. Min. Geol. Pal., 1908, I, 288-301; Nature, LXXVII, 186.

Abstracts in Geol. Centralbl., X, pp. 424-425; Sci. Progress, II, 519; Amer. Jour. Sci., XXV, 84-85.

—— 1908 A

Notes on the skull of *Lysorophus tricarinatus* Cope.

Bull. Amer. Mus. Nat. Hist., XXIV, 531-533, 1 figure.

Noticed in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 269.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 159.

Case, E. C.—Continued 1908 B

Description of vertebrate fossils from the vicinity of Pittsburgh, Pennsylvania.

Ann. Carnegie Mus., IV, 234-241, pl. lix, text-figs. 1-8.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 268; Geol. Centralbl., XII, 388, 599.

—— 1908 C

On the value of the evidence furnished by vertebrate fossils of age of certain so-called Permian beds in America.

Jour. Geol., XVI, 572-580.

—— 1908 D

A great Permian delta and its vertebrate life, with restorations by the author.

Pop. Sci. Month., LXXIII, 557-568, 13 text-figs.

Abstract in Nature, LXXIX, 228.

—— 1908 E

Permian glaciation and distribution of Permian reptiles.

Science (n.s.), XXVII, 255-256.

—— 1909 A

Communications and remarks before American Society of Vertebrate Paleontologists.

Science (n.s.), XXIX, 195, 198.

—— 1909 B

The dorsal spines of *Chameleo cristatus* Stuch.

Science (n.s.), XXIX, 979.

—— 1909 C

American paleontology and neolamarckism.

Rep. Mich. Acad. Sci., XI, 18-23.

—— 1910 A

New or little known reptiles and amphibians from the Permian(?) of Texas.

Bull. Amer. Mus. Nat. Hist., XXVIII, 163-181, 10 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 137-138; Geol. Centralbl., XVI, 217; Sci, Progress, V, 689; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 207.

—— 1910 B

The skeleton of *Pœcilospondylus francisi*, a new genus and species of Pelycosauria.

Bull. Amer. Mus. Nat. Hist., XXVIII, 183-188, 3 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 131-132; Geol. Centralbl., XVI, 217.

Case, E. C.—Continued 1910 C

Description of a skeleton of *Dimetrodon incisivus* Cope.

Bull. Amer. Mus. Nat. Hist., XXVIII, 189-196, pls. XV-XIX, text-figs. 1-5.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 132 and Geol. Centralbl., XVI, 217-218.

——— 1911 A

A revision of the Cotylosauria of North America.

Publ. Carnegie Instn. Wash., No. 145, 1-122 pages, pls. I-XIV, text-figs. 1-52.

The bibliography presents 71 titles.

Abstracts in Science (n.s.), XXXV, 779-780; Geol. Centralbl., XX, 705-706; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 146-149; Nature, LXXXVIII, 563; Sci. Progress, VI, 577.

——— 1911 B

Revision of the Amphibia and Pisces of the Permian of North America.

Publ. Carnegie Instn. Wash., No. CXLVI, I-VII; 1-148, pls. I-XXV, text-figs. 1-51.

For the discussion of the Pisces see Hussakof, L., 1911 A.

Abstracts in Geol. Centralbl., XIX, 443; Science (n.s.), XXXVI, 408-409; Sci. Progress, VI, 580, 581; Geol. Mag. (5), IX, 519.

——— 1912 A

Symposium on ten years progress in vertebrate paleontology. Paleozoic Reptilia and Amphibia.

Bull. Geol. Soc. Amer., XXIII, 200-204.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

——— 1912 B

Recent discoveries of Permian reptiles in Texas.

Verh. internat. Zool.-Kongr., Gratz, VIII, 1910, 681 (abstract).

——— 1914 A

The Red Beds between Wichita Falls, Texas, and Las Vegas, New Mexico, in relation to their vertebrate fauna.

Jour. Geol. XXII, 243-259, 11 figs.

——— 1914 B

Restoration of *Edaphosaurus cruciger* Cope.

Amer. Naturalist, XLVIII, 117-121, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 468-469; Nature XCIII, 333.

Case, E. C.—Continued 1914 C

On the structure of the inner ear in two primitive reptiles.

Biol. Bull., XXVII, 213-216, 4 text-figs.

——— 1915 A

The Permo-carboniferous Red Beds of North America and their vertebrate fauna.

Publ. Carnegie Instn. Wash., No. 207, 1-176, pls. I-XXIV, text-figs. 1-50.

Review in Nature, XCVI, 93-94; Amer. Jour. Sci. (4), XLI, 219; Science (n.s.), XLIII, 354.

——— 1915 B

On a nearly complete skull of *Symbos cavifrons* Leidy from Michigan.

Occ. Papers Mus. Zool. Univ. Mich., No. 13, 1-3, pls. I, II.

——— 1915 C

A mounted specimen of *Dimetrodon incisivus* Cope, in the University of Michigan.

Amer. Jour. Sci. (4), XL, 474-478, 6 text-figs.

Abstract in Geol. Zentralbl., XXV, 468.

——— 1915 D

Notes on the Permo-Carboniferous genus *Cricotus* Cope.

Science (n.s.), XLII, 797-798.

——— 1916 A

Big game hunters who do not shoot.

The Inlander (Univ. Mich.), XIX, No. 3, 18-21.

The big game is *Dimetrodon incisivus*.

——— 1916 B

Further evidence bearing on the age of the Red Beds in the Rio Grande Valley, New Mexico.

Science (n.s.), XLIV, 708-709.

——— 1917 A

The environment of the amphibian fauna at Linton, Ohio.

Amer. Jour. Sci. (4), XLIV, 124-136, 2 figs.

——— 1917 B

Notes on the possible evidence of the presence of a *Pareiasaurus*-like reptile in the Conemaugh series of West Virginia.

W. Virginia Geol. Surv.; Braxton and Clay Counties, 817-821, pls. XXVIII, XXIX.

——— 1918 A

Permo-Carboniferous conditions *versus* Permo-Carboniferous time.

Jour. Geol., XXVI, 500-506, 1 fig.

Case, E. C.—Continued 1918 B

A mounted skeleton of *Edaphosaurus cruciger* Cope, in the geological collection of the University of Michigan.

Occ. Papers Mus. Zool. Univ. Mich., No. 62, 1-6, pls. i-ii.

—— 1919 A

Notes on a specimen of *Stylemys nebracensis* (Leidy).

Amer. Jour. Sci. (4), XLVII, 435-438, 5 figs.
Abstract in Geol. Zentralbl., XXV, 44.

—— 1919 B

The environment of vertebrate life in the late Palæozoic in North America; a palæogeographic study.

Publ. Carnegie Instn. Wash., No. 283, i-vi, 1-273, tables, maps, 6 text-figs.

—— 1920 A

On a very perfect thoracic shield of a large labyrinthodont in the geological collections of the University of Michigan.

Occ. Papers Mus. Zool. Univ. Mich., LXXXII, 1-3, pl. 1.
Abstract in Rev. Geol. et Sci. con., IV, 1923, 90.
Review in Rev. crit. Paléozool., XXVII, 8.

—— 1920 B

Preliminary description of a new suborder of phytosaurian reptiles, with a description of a new species of *Phytosaurus*.

Jour. Geol. XXVIII, 524-535, 6 figs.
Abstract in Rev. Geol. et Sci. con., IV, 1923, 91.
Review in Rev. crit. Paléozool., XXVII, 9.

—— 1920 C

Notes on a specimen of *Stylemys nebrascensis*.

Rep. Mich. Acad. Sci., XXI, 119.

—— 1921 A

On an endocranial cast from a reptile *Desmatosuchus spurensis* from the Upper Triassic of western Texas.

Jour. Comp. Neur., XXXIII, 133-147, pls. i-iii.

—— 1921 B

A new species of *Ceratodus* from the Upper Triassic of western Texas.

Occ. Papers Mus. Zool. Univ. Mich., No. 101, 1-2, 1 fig.

—— 1921 C

Palæogeography.

Publ. Carnegie Instn. Wash, Year Book No. 20, for 1921, 443-445.

Case, E. C.—Continued 1921 D

Criteria for the determination of the climatic environment of extinct animals.

Bull. Geol. Soc. Amer., XXXII, 333-338.

—— 1922 A

Study of the vertebrate fauna and palæogeography of North America in the Permian period, with special reference to world relations.

Publ. Carnegie Instn. Wash, Year Book No. 20, for 1921, 443-445.

—— 1922 B

New reptiles and stegocephalians from the Upper Triassic of western Texas.

Publ. Carnegie Instn. Wash., No. 321, 1-84, 14 pls., 33 text-figs.
The bibliography on page 12 presents 12 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, II, Ref., 426-427.

—— 1923 A

Review of Franz Baron Nopsca's Fortschritte der Geologie und Paleontologie der Reptilien.

Science (n.s.), LVIII, 517-518.

—— 1924 A

Some new specimens of Triassic vertebrates in the museum of geology of the University of Michigan.

Pap. Mich. Acad. Sci. Arts, IV, 419-424, pls. xxii-xxiv, text-figs. 9-12.

—— 1924 B

A possible explanation of fenestration in the primitive reptilian skull, with notes on the temporal region of the genus *Dimetrodon*.

Contrib. Mus. Geol. Univ. Mich., II, No. 1, 1-12, 4 figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, Ref., 82.

—— 1925 A

A specimen of *Stylemys nebrascensis* Leidy, with the skull preserved.

Contrib. Mus. Geol. Univ. Mich., II, 87-91, 7 figs.

—— 1925 B

Note on a new species of the Eocene crocodilian *Allognathosuchus, A. wartheni*.

Contrib. Mus. Geol. Univ. Mich., II, 93-97, pl. i, 1 text-fig.

—— 1926 A

Genus *Cœlophysis* in the Upper Triassic beds of western Texas.

Geol. Soc. Amer. Prelim. list, XXXXIX, 54 (abstract).

Case, E. C.—Continued 1926 B

Environment of tetrapod life in the late Paleozoic of regions other than North America.

Publ. Carnegie Instn. Wash., No. 375, 1-211, 23 figs.

The bibliography presents 173 titles.

—— 1927 A

Genus *Cœlophysis* in the Upper Triassic beds of western Texas.

Bull. Geol. Soc. Amer., xxxviii, 227 (abstract).

—— 1927 B

The vertebral column of *Cœlophysis* Cope.

Contrib. Mus. Geol. Univ. Mich., ii, 209-222, pl. i, 9 text-figs.

—— 1927 C

A new species of trionychid turtle, *Amyda nelsoni*, from the Eocene beds of southwestern Wyoming.

Contrib. Mus. Geol. Univ. Mich., ii, 223-226, pl. i, 3 text-figs.

—— 1927 D

A complete phytosaur pelvis from the Triassic beds of western Texas.

Contrib. Mus. Geol. Univ. Mich, ii, 227-229, pl. i.

——, and S. W. **Williston** 1912 A

A description of the skulls of *Diadectes lentus* and *Animasaurus carinatus*.

Amer. Jour. Sci. (4), xxxiii, 339-348, 3 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, ii, Ref., 143; Geol. Centralbl., xviii, 523.

Review in Rev. crit. Paléozool., xvi, 232.

——, —— 1913 A

A description of *Aspidosaurus novomexicanus*.

Publ. Carnegie Instn. Wash., No. 181, 7-9, fig. 3.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, ii, 155; Amer. Jour. Sci. (4), xxxvii, 118; Geol. Zentralbl., xxi, 40.

——, —— 1913 B

Description of a nearly complete skeleton of *Diasparacutus zenos* Case.

Publ. Carnegie Instn. Wash., 181, 17-35, figs. 8-22.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, ii, Ref., 155-156; Amer. Jour. Sci. (4), xxxvii, 118.

Case, E. C., and S. W. **Williston**—Continued 1913 C

A description of certain collections of bones referred to *Sphenacodon* Marsh.

Publ. Carnegie Instn. Wash., No. 181, 61-70, text-figs. 38-40.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, ii, Ref., 158; Amer. Jour. Sci. (4), xxxvii, 118.

—— See also **Williston** and **Case**.

Case, Theodore S. 1879 A

Recent mastodon finds.

Kansas City Rev. Sci. Indust., iii, 241.

Caton, John Dean 1877 A

The antelope and deer of North America. A comprehensive scientific treatise upon the natural history, including the characters, habits, affinities, and capacity for domestication of the Antilocapridæ and Cervidæ of North America.

Pages 1-426, with numerous good engravings.

Caush, Douglas E. 1904 A

Some notes on the enamel.

Trans. Odont. Soc. G. Brit. (n.s.), xxxvi, 155-171, 5 text-figs.

Cautley, P. T., and H. **Falconer** 1836 A

Note on the *Ursus sivalensis*, a new fossil species from the Sivalik Hills.

Asiat. Res., xix, 193-200.

—— See also **Falconer** and **Cautley**.

Chaine, J. 1918 A

Remarques sur la métamérie des vertébrés.

C. R. Acad. Sci. Paris, clxvii, 733-736.

—— 1921 A

Caractères distinctifs des os péniens de loup et de chien.

C. R. Soc. Biol., lxxxiv, 125-126.

Chalikiopoulos, Leonidas 1905 A

The conditions of man's origin.

Rep. Internat. Geogr. Cong., 1904, Washington, viii, 647-656.

Chamberlin, Rollin T. 1916 A

Interpretation of the formations containing human bones at Vero, Florida.

Jour. Geol., xxv, 25-39, 9 text-figs.

Reprints of this paper were distributed a few days before Jan. 1, 1917.

Chamberlin, Rollin T.—Cont'd 1917 A

Further studies at Vero, Florida.

Jour. Geol., xxv, 667-683, 5 text-figs.

Chamberlin, T. C. 1894 A

Glacial phenomena in North America.

James Geikie's "The Great Ice Age," 724-775, with a map of the glaciated region.

—— 1900 A

On the habitat of the early vertebrates.

Jour. Geol., viii, 400-412.

—— 1919 A

Investigation *versus* propagandism.

Jour. Geol., xxvii, 305-338.

Chandler, Asa C. 1914 A

Antelopes in the fauna of Rancho La Brea.

Bull. Geol. Soc. Amer., xxv, 155.
Abstract.

—— 1914 B

The effect of extent of distribution on speciation.

Amer. Naturalist, xlviii, 129-160.
The bibliography comprises 26 titles.

—— 1916 A

Notes on *Capromeryx* material from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol., Univ. Calif., ix, 111-120, 4 text-figs.
Abstracts in Rev. crit. Paléozool., xxi, 88; Geol. Zentralbl., xxix, 474.

—— 1916 B

A study of the skull and dentition of *Bison antiquus* Leidy, with special reference to material from the Pacific coast.

Bull. Dept. Geol., Univ. Calif., ix, 121-135, 12 text-figs.
Abstracts in Rev. crit. Paléozool., xxi, 89; Geol. Zentralbl., xxix, 474.

—— 1916 C

A study of the structure of feathers, with reference to their taxonomic significance.

Univ. Calif. Publ. Zool., xiii, 243-446, pls. xiii-xxxvii, 7 text-figs.
For abstract see Aquila, xxii (1915), 393.

—— 1916 D

The bison of Rancho Le Brea (abstract).

Bull. Geol. Soc. Amer., xxvii, 170.

Chaney, Ralph 1925 A

The Mascall flora—Its distribution and climatic relation.

Publ. Carnegie Instn. Wash., No. 349, art. 2, 25-48, pl. i, 1 text-fig.

Chapman, Frank M. 1902 A

Flamingoes' nests.

Bird Lore, iv, 177-181, 1 plate. 3 text-figs.
Reprinted in Rep. Smithson. Instn., 1903 (1904), 573-575, pls. i, ii.

—— 1904 A

The problem of the soaring bird.

Country Life in America, v, 482-483, 7 figs.

—— 1905 A

A contribution to the life history of the American flamingo (*Phœnicopterus ruber*) with remarks upon specimens.

Bull. Amer. Mus. Nat. Hist. xxi, 53-77, 16 figs.

Chapman, Frederick 1909 A

On the occurrence of the selachian genus *Corax* in the Lower Cretaceous of Queensland.

Proc. Roy. Soc. Victoria (n.s.), xxi, 452-453.
Abstract in Nature, xcii, 640.

—— 1916 A

On the generic position of "*Asterolepis ornata var. australis*" McCoy, with description of a new variety.

Proc. Roy. Soc. Victoria, xxviii, 211-215, pls. xx, xxi.

—— 1918 A

Descriptions and revisions of the Cretaceous and Tertiary fish remains of New Zealand.

N. Zeal. Geol. Surv. Pal. Bull., vii, i-vi+ 1-45 pages, 1 map, pls. i-ix, 2 text-figs.

Chapman, Henry C. 1875 A

Observations in the structure of the manatee.

Proc. Acad. Nat. Sci. Phila., 1875; 452-462, plate xxvi.

—— 1894 A

Homologies of the alisphenoid and petromastoid bones in vertebrates.

Proc. Acad. Nat. Sci. Phila., xv, 32-52, 12 text-figs.

—— 1904 A

Observations on *Tupaia*, with reflections on the origin of Primates.

Proc. Acad. Nat. Sci. Phila., lvi, 148-156.
Abstract in Jour. Micr. Soc., 1904, 297.

Chardin, P. Teilhard de 1915 A
Les carnassiers des phosphorites du Quercy.
Ann. Paleont. Paris, IX, 103-191, pls. xii-xx, 8 tables, 13 text-figs.
The bibliography contains 28 titles.
Abstract in Rev. crit. Paléozool., XX, 85-87.
Review in Neues Jahrb. Min. Geol. Pal., 1923, I, Ref., 155-168.

—— 1920 A
Sur la succession des faunes de mammifères dans l'Éocene inférieur européen.
C. R. Acad. Sci. Paris, CLXXI, 1161-1162.

—— 1921 A
Les mammifères de l'Éocene inférieur français et leurs gisements.
Ann. Paléont. Paris, X, 171-176, 2 figs.

—— 1922 A
Les mammifères de l'Éocène inférieur français et leurs gisements.
Ann. Paléont. Paris, XI, 9-116, 8 pls., 40 text-figs.
Also with pagination 1-108. Pages 110-112 are the bibliography.
The continuation of Chardin, T., 1921 A.
Abstract in Rev. crit. Paléozool., XXVI, 128-130.

—— 1924 A
Les gisements de mammifères paléocènes de la Belgique.
Quart. Jour. Geol. Soc., LXXX, 12-16.

Charlesworth, E. 1839 A
On the fossil remains of a species of *Hybodus,* from Lyme Regis.
Mag. Nat. Hist., III, 242-248, pl. iv.

—— 1855 A
Notice on new vertebrate fossils.
Rep. Brit. Assoc. Adv. Sci., XXIV, Liverpool, 1854; Trans., 80.

Chomenko, J. 1913 A
Les ancêtres des Cervinæ contemporains et fossiles.
Annuaire géol. min. Russie, XV, 107-143, pls. vi-ix.
The paper is in Russian, but there is a résumé in French occupying pages 132-142.

Chomjakoff, M. 1901 A
Zur Entwickelungsgeschichte des Schädels einiger Tagraubvögel.
Anat. Anz., XIX, 135-140, 3 text-figs.

Chranilov, Ivar 1926 A
Der Schwimmblasenapparat bei *Catostomus* und einige allgemeine Erwägungen über den Weber'schen Apparat der Ostariophysi.
Anat. Anz., LXI, 49-69, 5 figs.

Chranilov, N. S. 1925 A
Vergleichend-anatomische Untersuchungen des Schwimmblasenapparates der Fische aus der Familie der Cobitidæ.
Trav. Soc. Naturalistes Leningrad, LV, 45-96, 18 figs.
The bibliography is on pages 88-89. Pages 45-96 are in Russian. A synopsis in German occupies pages 90-96.

Christman, Erwin S. 1921 A
Restorations of fossil vertebrates.
Nat. Hist., XXI, 620-625.

Christol, J. 1834 A
Mémoire sur le moyen hippopotame fossile de Cuvier, replacé au genre des dugongs.
Ann. Sci. nat. (2), II, 257-277, pl. xiii.

Chubb, S. H. 1912 A
Notes on the trapezium in the Equidæ.
Bull. Amer. Mus. Nat. Hist., XXXI, 113-115, 3 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, 3, 146.

Cipriani, Lidio 1923 A
Il *Mastodon andium* Cuvier del Guatemala.
Atti Accad. Lincei. Rend. (5), XXXII, 2, 92-94.

Clapp, Frederick G. 1908 A
Complexity of the glacial period in northeastern New England.
Bull. Geol. Soc. Amer., XVIII, 505-556, pls. lvii-lx, 9 text-figs.

Clark, Bruce L. 1921 A
The marine Tertiary of the West Coast of the United States: Its sequence, paleogeography, and the problems of correlation.
Jour. Geol., XXIX, 583-614, correlation table, 12 figs.

——, and Ralph **Arnold** 1923 A
Fauna of the Sooke formation Vancouver Island.
Bull. Dept. Geol. Univ. Calif., XVI, 123-179, pls. xv-xlii.

Clark, Frank Wigglesworth 1892 A
[Chemical analyses of bones of man and mylodon.]
Amer. Naturalist., XXVI, 630.
The bones were found at Natchez, Mississippi.

Clark, Hubert Lyman 1901 A
The classification of birds.
Auk, XVIII, 370-381.

Clark, W. B., A. B. **Bibbins**, and E. W. **Berry** 1911 A

The Lower Cretaceous deposits of Maryland.

Maryland Geol. Surv. Lower Cretaceous vol., 24-98, with pls. i-x.

For notice see Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 121.

——, and B. C. **Miller** 1912 A

Geology of the Virginia coastal plain.

Virginia Geol. Surv. Bull. No. IV, 87-190, pls. v-xiv.

Clark, W. E. Le Gros 1924 A

On the skull of *Tupaia*.

Proc. Zool. Soc. Lond., 1924, 559-567, 6 figs.

The bibliography presents 11 titles.

——, and Charles F. **Sonntag** 1926 A

A monograph of *Orycteropus afer*. III: The skull.

Proc. Zool. Soc. Lond., 1926, 445-485, text-figs. 70-73.

Clark, William 1898 A

Some new points on the fin attachment of *Dinichthys* and *Cladodus*.

Rep. Ohio Acad. Sci., VI, 46-48, 3 text-figs.

Clarke, J. M. 1887 A

Note on mastodon bones, etc. Letter of J. M. Clarke to James Hall, State Geologist.

Rep. State Geologist N. Y., VI, 1886 (1887), 34-35, figs.

—— 1888 A

Report on the bones of the *Mastodon* or *Elephas* found associated with charcoal and pottery at Attica, Wyoming County, New York.

Rep. N. Y. State Mus., XLI, 388-390, with plate. As a separate, pages 1-7.

—— 1895 A

The fossil fishes of Cañon City, Colorado.

Amer. Geologist, XV, 121.

—— 1903 A

Distribution of mastodon remains in New York.

Science (n.s.), XVII, 297.

See also Bull. Geol. Soc. Amer., XIV, 537.

—— 1903 B

The Westfield mastodon.

Bull. N. Y. State Mus., LXIX, 863-864.

This bulletin forms part of the report of the State Paleontologist, 1902 (1903), and of the 56th Ann. Rep. N. Y. State Mus. 1902 (1904), Vol. II.

Clarke, J. M.—Continued 1903 C

Mastodons of New York. A list of discoveries of their remains. 1705-1902.

Bull. N. Y. State Mus., LXIX, 921-933, with map showing distribution, and pls. i, ii.

Abstract in Geol. Centralbl., V, 38.

—— 1908 A

Mastodons.

Rep. N. Y. State Mus., LX, vol. I, 59-60.

—— 1908 B

Mastodons.

Rep. N. Y. State Mus., LXI, vol. I (Mus. Bull. 121), 44-49.

A continuation of list of 1904 A.

Contains an important quotation from David Schoepf's Reise, etc.

—— 1911 A

Notes on the geology of the Gulf of St. Lawrence.

Bull. N. Y. State Mus., CXLIX, 121-133, pls., maps, text-figs.

—— 1912 A

Mastodons and mammoth remains.

Science (n.s.), XXXVI, 500.

—— 1913 A

Dalhousie and the Gaspé peninsula.

Can. Geol. Surv. Guide Book No. 1, pt. i, 85-118, maps and figs.

Presents a list of the fossil fishes found at Scaumenac Bay.

—— 1923 A

Restoration of the Cohoes mastodon.

Bull. Geol. Soc. Amer., XXXIV, 127 (abstract).

—— 1923 B

Pyorrhœa in the Cohoes mastodon.

Bull. Geol. Soc. Amer., XXXIV, 127 (abstract).

—— 1923 C

Temple Hill mastodon.

Bull. Geol. Soc. Amer., XXXIV, 127 (abstract).

——, and D. Dana **Luther** 1904 A

Stratigraphic and paleontologic map of Canandaigua and Naples quadrangles.

Bull. N. Y. State Mus., LXIII (Paleont. 71), 1-76.

This forms part of the Rep. N. Y. State Mus., LVI, 1904.

——, and Rudolph **Ruedemann** 1903 A

Catalogue of type specimens of Paleozoic fossils in New York State Museum.

Bull. N. Y. State Mus., LXV, 1-847 (Paleontology, 8).

Clarke, Robert. See St. G. **Mivart**, and Robert **Clarke**

Clason, E. 1871 A

Die Morphologie des Gehörorgans der Eidechsen.

Anat. Stud, I, 300-376, pls. xvi, xvii.

Citations of the literature in foot-notes.

Claus, C. 1895 A

Ueber Flugorgane von Wirbelthieren und das Problem der Flugtechnik.

Schrift. Ver. Verbr. naturw. Kenntn. Wien, xxxv, 339-369.

Claus, Theodore 1911 A

Untersuchungen über die Entwickelung des Supraoccipitale und Interparietale beim Schaf.

Anat. Anz., xxxix, 293-320, 364-374, pls. i, ii, 19 text-figs.

The bibliography comprises 28 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 25-27.

Claypole, E. W. 1883 B

Note on the occurrence of *Holoptychius* about 500 feet below the recognized top of the Chemung group, in Bradford County [Penn.].

Proc. Amer. Philos. Soc., xx, 531.

—— 1883 C

On the occurrence of fossiliferous strata in the Lower Ponent (Catskill) group of middle Pennsylvania.

Amer. Naturalist, xvii, pt. 1, 274-282.

—— 1884 C

Fish-remains in the North American Silurian rocks.

Science (n.s.), iv, 34.

—— 1884 D

Fish-remains in the North American Silurian rocks.

Science (n.s.), iv, 270.

—— 1884 E

On some fish remains recently discovered in the Silurian rocks of Pennsylvania.

Science (n.s.), iv, 326.

—— 1885 E

On the recent discovery of pteraspidian fish in the Upper Silurian rocks of North America.

Geol. Mag., ii, 89-90.

—— 1893 H

The teeth of Paleozoic fishes.

Amer. Micros. Soc., xv, 22-23.

A brief discussion.

Claypole, E. W.—Continued 1895 I

On a new gigantic placoderm from Ohio.

Rep. Ohio Acad. Sci., iii, 8-9.

—— 1897 B

A new *Dinichthys—Dinichthys keplcri.*

Amer. Geologist, xix, 322-324, pl. xx.

—— 1897 C

A fossiliferous stalagmite in the Cuyahoga Glen.

Rep. Ohio Acad. Sci., v, 53-55.

—— 1900 A

Traquair on Silurian fish.

Amer. Geologist, xxv, 244-248.

—— 1903 A

The Devonian era in the Ohio basin.

Amer. Geologist, xxxii, 15-41, pls. iv-x; 79-105, pls. xvi-xviii; 240-250; 312-322; 335-353.

Abstract in Geol. Centralbl., vi, 756.

Clayton, J. E. 1864 A

Remarks on donations of teeth.

Proc. Calif. Acad. Sci., iii, 171-172.

Noticed in Amer. Jour. Sci. (2), xliii, 1865, 270.

Cleland, Herdman F. 1911 A

The fossils and stratigraphy of the Middle Devonic of Wisconsin.

Wis. Geol. Nat. Hist. Surv. Bull. No. xxi, Sci. ser. No. 6, i-vi+1-222 pages, pls. i-liii, 5 text-figs.

The descriptions are mostly quoted from C. R. Eastman and J. S. Newberry.

Abstract in Geol. Centralbl., xix, 438-440.

Cleland, John 1863 A

On ribs and transverse processes, with special relation to the theory of the vertebrate skeleton.

Nat. Hist. Rev., iii, 116-132, 1 text-fig.

—— 1863 B

On the relations of the vomer, ethmoid, and intermaxillary bones.

Phil. Trans. Roy. Soc. Lond., cliii, 289-321, pls. iv, v.

—— 1870 A

On the interpretation of the limbs and lower jaw.

Rep. Brit. Assoc. Adv. Sci., xxxix, Exeter, 1869, 119-120.

An abstract.

—— 1887 A

Culminating Sauropsida.

Nature, xxxv, 391-392.

Cleland, John—Continued 1903 A
Notice of a hitherto unrecorded element in the occipital bone of seals.
Rep. Brit. Assoc. Adv. Sci., LXXII, Belfast, 1902, 646-647.

Clift, W. 1832 A
Bones of the *Megatherium*.
Lond. Edinb. Philos. Mag., I, 234.
A brief abstract of paper read. For complete paper see Clift, W., 1835 A.

Cligny, Adolphe 1899 A
Les pleurapophyses caudales des sauriens.
Trav. Stat. zool. Wimereux, VII, 126-135.
There is a bibliography of 12 titles.

Clinton, De Witt 1815 A
Introductory discourse; with notes and illustrations.
Trans. Lit. and Philos. Soc. N. Y., i, 21-184.

Cobb, Collier 1923 A
The immediate ancestor of our domestic horse found fossil in Halifax County, North Carolina.
Jour. Elisha Mitchell Sci. Soc., XXXIX, 31-32.

Cockerell, T. D. A. 1906 A
The fossil fauna and flora of the Florissant (Colorado) shales.
Univ. Colorado Stud., III, 157-176.
Abstract in Geol. Centralbl., XI, 418-419.

—— 1908 A
Some results of the Florissant expedition of 1908.
Amer. Naturalist, XLII, 569-581, 12 text-figs.
Mentioned in Nature, LXXIX, 44.

—— 1908 B
A new locality for Miocene mammals.
Science (n.s.), XXVIII, 683.

—— 1908 C
The fishes of the Rocky Mountain region.
Univ. Colorado Stud., V, 159-178, 9 text-figs.
Abstract in Geol. Centralbl., XII, 227.

—— 1909 A
A fossil ground sloth in Colorado.
Univ. Colorado Stud., VI, 309-312, pls. i, ii.
Abstracts in Geol. Centralbl., XIV, 489; Sci. Progress, IV, 664.

—— 1909 B
A fossil gar-pike from Utah.
Science (n.s.), XXIX, 796.

Cockerell, T. D. A.—Continued 1909 C
The nomenclature of the American fishes usually called *Leuciscus* and *Rutilus*.
Proc. Biol. Soc. Wash., XXII, 215-217.

—— 1910 A
The scales of the European cyprinoid fishes.
Zool. Anz., XXXVI, 475-480, 3 text-figs.

—— 1910 B
The scales of the clupeid fishes.
Proc. Biol. Soc. Wash., XXIII, 61-63.

—— 1910 C
The scales of the African cyprinid fishes, with a discussion of related Asiatic and European species.
Proc. Biol. Soc. Wash., XXIII, 141-152, pl. iii.

—— 1910 D
On the scales of some malacopterygian fishes.
Proc. Biol. Soc. Wash., XXIII, 111-113.

—— 1910 E
The scales of the atherinid fishes.
Proc. Biol. Soc. Wash., XXIII, 47-48.

—— 1910 F
The scales of the African characinid fishes.
Smithson. Misc. Coll., LVI, art. 1, 1-10, pls. i, ii, 2 text-figs.

—— 1911 A
The scales of the dipnoan fishes.
Science (n.s.), XXXIII, 831-832.

—— 1911 B
The scales of the albulid fishes.
Science (n.s.), XXXIII, 865-866.

—— 1911 C
Additional note on reticulated fish scales.
Science (n.s.), XXXIV, 126-127.

—— 1911 D
Note on the scales of the osteoglossid fishes.
Proc. Biol. Soc. Wash., XXIV, 39.

—— 1911 E
Some notes on fish scales.
Proc. Biol. Soc. Wash., XXIV, 209-213.

—— 1911 F
The scales of fresh-water fishes.
Biol. Bull., XX, 367-376, pls. i-v.

—— 1913 A
Ordovician(?) fish remains in Colorado.
Amer. Naturalist, XLVII, 246-247.
For strictures on this paper see Junius Henderson, Proc. Colorado Sci. Soc., XI, 12, 1914.

Cockerell, T. D. A.—Continued 1913 B
Observations on fish scales.
Bull. U. S. Bur. Fish., XXXII, 1912 (1913), 117-174, pls. xxxii-xl, 52 text-figs.

—— 1914 A
Some fossil fish scales.
Zool. Anz., XLV, 189-192, 1 text-fig.

—— 1915 A
Review of Boulenger's "Catalogue of fresh water fishes of Africa," Vol. III.
Science (n.s.), XLIII, 31-32.

—— 1916 A
The scales of the gonorhynchid fishes.
Science (n.s.), XLIII, 899-900.

—— 1916 B
Progress. A drama of evolution in five acts.
Amer. Mus. Jour., XVI, 183-191, 6 ills.

—— 1916 C
The auditory ossicles of *Aplodontia*.
Bull. Amer. Mus. Nat. Hist., XXXV, 531-532, 3 figs.

—— 1916 D
The scales of the brotulid fishes.
Ann. Mag. Nat. Hist. (8), XVIII, 317-325.

—— 1917 A
European fossil fish scales.
Amer. Naturalist, LI, 61-63.

—— 1919 A
Some American Cretaceous fish scales.
U. S. Geol. Surv. Profess. Pap. CXX, 165-188, pls. xxxi-xxxvii.
Preceded by a preface by Dr. T. W. Stanton in which is presented a table showing the relations of local subdivisions of Colorado and Montana groups.
Abstract in Geol. Zentralbl., XXVII, 412.

—— 1923 A
[Note on gonorhynchids.]
In Jordan, D. S., 1923 A, 120.

—— 1923 B
A fossil cichlid fish from the Republic of Haiti.
Proc. U. S. Nat. Mus., LXIII, art. 7, 1-2, pl. i.

—— 1923 C
The supposed plumage of the Eocene bird *Diatryma*.
Amer. Mus. Novit., LXII, 1-4, 1 fig.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, I, Ref., 457.

Cockerell, T. D. A.—Continued 1923 D
Fossil mammals at the Colorado Museum of Natural History.
Scient. Monthly, XVII, 271-277, 7 figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, II, Ref., 456, 3 lines.

—— 1923 E
The scales of the fossil fish *Eobrycon*.
Science (n.s.), LVII, 418.

——, and Edith M. **Allison** 1909 A
The scales of some American Cyprinidæ.
Proc. Biol. Soc. Wash., XXII, 157-163, pl. iii, 3 text-figs.

——, and Otis **Callaway** 1909 A
Notes on the scales of fishes. The herbivorous Cyprinidæ.
Proc. Biol. Soc. Wash., XXII, 121-123.

—— 1909 B
Observations on the fishes of the genus *Notropis*.
Proc. Biol. Soc. Wash., XXII, 189-196, 2 text-figs.

——, and L. **Miller** 1914 A
The auditory ossicles of American rodents. II: Families other than Arvicolidæ and Muridæ.
Bull. Amer. Mus. Nat. Hist., XXXIII, 365-378, text-figs. 61-124.

——, Lewis I. **Miller** and Morris **Printz** 1914 A
The auditory ossicles of American rodents.
Bull. Amer. Mus. Nat. Hist., XXXIII, 346-350.

——, and Evelyn V. **Moore** 1910 A
On the modifications of the circuli in the scales of Asiatic cyprinid fishes.
Zool. Anz., XXXVI, 252-253, 5 text-figs.

—— 1910 B
On the nature of the teeth in ctenoid scales.
Proc. Biol. Soc. Wash., XXIII, 91-93, 3 text-figs.

——, and M. **Printz** 1914 A
Auditory ossicles of American rodents. I: Arvicolidæ and Muridæ.
Bull. Amer. Mus. Nat. Hist., XXXIII, 351-364, figs. 1-55.

Codrington, Thomas 1908 A
Stones from an elephant's stomach.
Proc. Zool. Soc. Lond., 1908, p. 203.
A very brief note.

Cohen, Th. E. de 1918 A
Die Morphogenese der oberen Prämolaren.
Anat. Anz., LI, 33-48, 1 pl., 5 text-figs.
The bibliography presents 18 titles.

Coker, R. E. 1905 A
Orthogenetic variation?
Science (n.s.), XXII, 873-875.

—— 1905 B
Gadow's hypothesis of "Orthogenetic variation" in *Chelonia*. With a note on diversity in its relation to locality or species.
Johns Hopkins Univ. Circ. (n.s.), No. 5, 9-24, 7 text-figs.

—— 1910 A
Diversity in the scutes of Chelonia.
Jour. Morphol., XXI, 1-75, pls. i-xiv, text-figs. A-Q.

Coleman, A. P. 1895 A
Glacial and interglacial deposits near Toronto.
Jour. Geol., III, 622-645, 3 text-figs.

—— 1899 A
The Iroquois beach at Toronto.
Ottawa Naturalist, XII, 195.

—— 1900 A
On the Pleistocene near Toronto.
Rep. Brit. Assoc. Adv. Sci., LXX, Bradford, 1900, 328-334.

—— 1901 A
Glacial and interglacial beds near Toronto.
Jour. Geol., IX, 285-310.

—— 1901 B
Marine and fresh water beaches of Ontario.
Bull. Geol. Soc. Amer., XII, 129-146, 2 maps.

—— 1901 C
Sea beaches of eastern Ontario.
Rep. Bur. Mines, Toronto, 1901, No. 5, 215-227, 2 pls.

—— 1904 A
Iroquois beach in Ontario.
Bull. Geol. Soc. Amer., XV, 347-368, pl. xxii.

—— 1905 A
Glacial lakes and Pleistocene changes in the St. Lawrence valley.
Rep. Internat. Geogr. Congr., VIII, Washington, 1904, 480-486.

—— 1907 A
Interglacial periods in Canada.
C. R. Cong. geol. internat., X, Mexico, 1906, 1237-1258.

Coleman, A. P.—Continued 1913 A
Geology of the Toronto region.
The natural history of the Toronto region, chap. III, 51-81, with map. Edited by J. H. Faull and published by the Canadian Institute, Toronto.

—— 1913 B
Toronto and vicinity.
Ontario Bureau Mines, Guide book No. 6, 5-34, with maps and figures.

—— 1914 A
An estimate of postglacial and interglacial time in North America.
C. R. Congr. internat. Geol., XII, 1913, Ottawa, 435-449, 4 figs.

—— 1917 A
Wave work as a measure of time.
Amer. Jour. Sci. (4), XLIV, 351-359, 1 fig.

Coles, Russell J. 1910 A
Observations on the habits and distribution of certain fishes taken on the coast of North Carolina.
Bull. Amer. Mus. Nat. Hist., XXVIII, 337-348.

—— 1916 A
My fight with the devilfish.
Amer. Mus. Jour., XVI, 217-227, 8 ills.
The "devilfish" is *Manta birostris*.

—— 1916 B
Natural history notes on the devilfish, *Manta birostris* (Walbaum) and *Mobula olfersi* (Müller).
Bull. Amer. Mus. Nat. Hist., XXXV, 649-657, 5 figs.

Collett, John 1872 A
Geology of Dubois County, Indiana.
Geol. Surv. Ind., 3d and 4th Ann. Reports, 1871, 1872, 192-237.

—— 1876 A
Geological Report on Vanderburg, Owen, and Montgomery Counties, Indiana.
Geol. Surv. Ind., VII, 240-422.

—— 1881 A
The mammoth and the mastodon.
Geol. Surv. Ind., Rep. Bur. Stat. Geol., II, 16-18; of complete report, 384-386.

—— 1883 A
Geological Survey of Jasper County [Indiana].
Geol. Surv. Ind., XII, 65-76.

Collett, R. 1906 A

Nogle Meddelelser om Nacbhvalen (*Hyperoodon*), og Hvidfisken (*Delphinapterus*). [Some notes on bottle-nosed (*Hyperoodon*) and white whales (*Delphinapterus*)].

Afh. Bergens Mus. 'Aarb., 1906, art. 6, 1-25.

Collier, Arthur J. 1902 A

A reconnaissance of the northwestern portion of Seward Peninsula, Alaska.

U. S. Geol. Surv., Profess. Paper No. 2, 1-70, pls. i-xii.

—— 1903 A

Coal resources of the Yukon, Alaska.

Bull. U. S. Geol. Surv., CCXVIII, 1-71, 2 maps, 6 plates.

—— 1906 A

Geology and coal resources of the Cape Lisburne region, Alaska.

Bull. U. S. Geol. Surv., CCLXXVIII, 1-54, pls. i-ix.

—— 1908 A

Geography and geology [of the gold placers of parts of Seward Peninsula, Alaska].

Bull. U. S. Geol. Surv., CCCXXVIII, 40-110.

—— 1918 A

Geology of northeastern Montana.

U. S. Geol. Surv. Profess. Pap. CXX, 14-39, map and figs.

Collinge, W. E. 1893 B

Note on the lateral canal system of *Polypterus*.

Proc. Birmingh. Philos. Soc., VIII, 255-262, pls. i-iii.

The bibliography presents 8 titles.

—— 1893 C

The lateral canal system of *Lepidosteus osseus*.

Proc. Birmingh. Philos. Soc., VIII, 263-272, pls. iv-ix.

The bibliography presents 6 titles.

—— 1894 A

The sensory canal system of fishes. Part I: Ganoidei.

Quart. Jour. Micr. Sci. XXXVI, 499-537, pls. xxxix, xl.

Abstract in Rep. Brit. Assoc. Adv. Sci., 63d Meet., 1893, 810-811.

—— 1895 B

On the sensory canal system of fishes. Teleostei—Suborder A. Physostomi.

Proc. Zool. Soc. Lond., 1895, 274-299, pls. xviii-xxi.

Collinge, W. E.—Continued 1895 C

On the sensory and ampullary canals of *Chimæra*.

Proc. Zool. Soc. Lond., 1895, 878-890, pls. li-liii.

—— 1895 D

Some researches upon the sensory canal system of ganoids.

Proc. Birmingh. Nat. Hist. Soc., IX, 77-83.

Collins, Holdridge Ozro 1910 A

[Remarks on fossils of Rancho La Brea].

Bull. So. Calif. Acad. Sci., IX, 5-7.

Collinson, Peter 1768 A

An account of some very large fossil teeth found in North America.

Phil. Trans. Roy. Soc. Lond., LVII, 464-467.

—— 1768 B

Sequel to the foregoing account of the large fossil teeth.

Phil. Trans. Roy. Soc. Lond., LVII, 468-469, pls. xxi, xxii.

Colyer, J. F. 1905 A

Variations and diseases of the teeth of horses.

Trans. Odont. Soc. G. Brit. (n.s.), XXXVIII, 42-74, 18 text-figs.

Condon, Thomas 1871 A

The Willamette Sound.

Overland Monthly, VII, 468-473.

—— 1896 A

Scientific description of two new fossil dogs.

Bull. Univ. Oregon, II, No. 6, 11, 1 plate.

Describes *Canis shoshonensis* and *C. rurestris*.

—— 1902 A

The two islands and what became of them.

By Thomas Condon, Ph.D., Professor of Geology, University of Oregon. Portland, Oregon, 1902. 1-211 pages, with portrait of author and pls. i-xxx.

—— 1906 A

A new fossil pinniped (*Desmatophoca oregonensis*) from the Miocene of the Oregon coast.

Bull. Univ. Oregon, III, Suppl. No. 3, 5-14, 2 plates, 3 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 440; Sci. Progress, I, 452-453; Nature, LXXXI, 208; Rev. crit. Paléozool., X, 203.

Condon, Thomas—Continued 1910 A
Oregon Geology: A revision of "The Two Islands."
Edited by Ellen Condon McCornack. Portland, Oregon, 1910. 1-187 pages, i-xvii, pls. i-xxx.
Contains a sketch of the author's life.

Conklin, Edwin G. 1925 A
Note on microscopic structure of ossicles of *Paramylodon.*
Publ. Carnegie Instn. Wash., No. 331, 121.

Conklin, W. A. 1873 A
The manatee at Central Park (New York).
Forest and Stream, I, 166.

Connell, A. 1835 A
On the chemical nature of fossil scales, as illustrative of the character of the animals to which they have belonged.
Edinb. New Philos. Jour., XIX, 300-306.

—— 1835 B
Analyse chimique des restes fossiles de Burdiehouse.
L'Institut, III, 191-192.
Gives results of analyses of a fin-ray of *Gyracanthus* and of scales of *Megalichthys.*

Conrad, Timothy A. 1832 A
Fossil shells of the Tertiary formations of North America, i.
Phila., 1832, i-viii+1-56 pages, pls. i-xviii.

—— 1835 A
Observations on the Tertiary strata of the Atlantic Coast.
Amer. Jour. Sci. (1), XXVIII, 104-111.

—— 1838 A
Fossils of the Tertiary formation of the United States.
Phila., 1838, i-xvi+1-89 pages, pls. i-xlix.
An extremely rare work. Republished by W. H. Dall, 1893, under title of Republication of Conrad's Fossils of the Medial Tertiary of the United States.

—— 1842 A
Observations on a portion of the Atlantic Tertiary region, with a description of new species of organic remains.
Bull. Proc. Nat. Instn. Prom. Sci., II, 171-194, pls. i, ii.

Conwentz, Hugo 1900 A
Zur Verbreitung des Moschusochsen und anderer Tiere in Nordost-Grönland.
Verh. Ges. Erdkunde, XXVII, 427-432.
Abstract in Geol. Centralbl., II, 284.

Conybeare, W. D. 1824 B
On the discovery of an almost perfect skeleton of the Plesiosaurus.
Trans. Geol. Soc. Lond. (2), I, 381-389.

—— See also **De la Beche** and **Conybeare.**

Cook, George H. 1878 A
Tusk of mastodon in drift.
Rep. Geol. Surv. New Jersey, 1878, 14-15.

Cook, Harold James 1908 A
A new rhinoceros from the Lower Miocene of Nebraska.
Amer. Naturalist, XLII, 543-545, 2 text-figs.

—— 1909 A
A new proboscidean from the Lower Miocene of Nebraska.
Amer. Jour. Sci. (4), XXVIII, 183-184, fig. 1.
Abstract in Geol. Centralbl., XV, 311.

—— 1909 B
Notice of a new camel from the Lower Miocene of Nebraska.
Amer. Naturalist, XLIII, 188-189.
Abstract in Geol. Centralbl., XIV, 338.

—— 1909 C
A new genus of rhinoceros from Sioux County, Nebraska.
Neb. Geol. Surv., III, 243-248, pl. i.

—— 1909 D
Some new Carnivora from the lower Miocene beds of western Nebraska.
Neb. Geol. Surv., III, 259-272, 6 text-figs.

—— 1912 A
A new species of rhinoceros, *Diceratherium loomisi,* from the lower Miocene of Nebraska.
Neb. Geol. Surv., VII, 29-32, 3 figs.
Abstract in Geol. Centralbl., XIX, 398.

—— 1912 B
Notice of a new genus of rhinoceros from the Lower Miocene.
Science (n.s.), XXXV, 219-220.

—— 1912 C
A new genus and species of rhinoceros, *Epiaphelops virgasectus,* from the lower Miocene of Nebraska.
Neb. Geol. Surv., VII, 21-22, 1 pl.
Abstract in Geol. Centralbl., XIX, 398.

—— 1912 D
Faunal lists of the Tertiary mammals of Sioux County, Nebraska.
Neb. Geol. Surv., VII, 33-45.

—— 1914 A
Notes on the occurrence of the mammoth in Sioux County, Nebraska.
Neb. Geol. Surv., VII, pt. 8, 47-48, pl. 1.

Cook, Harold James—Cont'd 1914 B
A new canid from the Lower Pliocene of Nebraska.
Neb. Geol. Surv., VII, 49-50, pls. i-iii.

——— 1915 A
Note on the dentition of *Amphicyon amnicola*, a gigantic fossil dog.
Neb. Geol. Surv., VII, 57-58, pl. i.

——. 1915 B
Notes on the geology of Sioux County, Nebraska, and vicinity.
Neb. Geol. Surv., VII, 59-75, pl. i, 7 text-figs.

——— 1917 A
First recorded amphibian from the Tertiary of Nebraska.
Bull. Geol. Soc. Amer., XXVIII, 213.

——— 1922 A
Two new bunomastodonts from Colorado.
Proc. Colorado Mus. Nat. Hist., IV, 2-8, 6 pls. of 12 figs.

——— 1922 B
A Pliocene fauna from Yuma County, Colorado, with notes on the closely related Snake Creek beds from Nebraska.
Proc. Colorado Mus. Nat. Hist., IV, No. 2, 3-15, 33 figs.
Abstract in Rev. crit. Paléozool., XXVIII, 100, 1924.

——— 1922 C
Oldest known peccary from America.
Pan-Amer. Geol., XXXVII, 357-358, 1 fig.

——— 1925 A
Definite evidence of human artifacts in American Pleistocene.
Science (n.s.), LXII, 459-460.

——— 1926 A
A new genus of uintatheres from Colorado.
Proc. Colorado Mus. Nat. Hist., VI, 7-11, 5 unnumbered plates.

——— 1926 B
New Eocene titanotheres from Moffat County, Colorado.
Proc. Colorado Mus. Nat. Hist., VI, 12-18, pls. i-xi.

———. 1926 C
A new, gigantic fossil dog from Colorado.
Proc. Colorado Mus. Nat. Hist., VI, 29-31, 1 plate.

——— 1926 D
Who were the first Americans? Whence came they?
Scient. Amer., Nov., 1926, 334-336, 7 figs.

Cook, Harold James—Cont'd 1927 A
New trails of ancient man. Remarkable finds of ancestral man have recently been made in Nebraska and Oklahoma.
Scient. Amer., Aug., 1927, 114-117, 8 illust.

———. 1927 B
A new rhinoceros of the genus *Teleoceras* from Colorado.
Proc. Col. Mus. Nat. Hist., VII, 1-5, 4 figs.

——— 1928 A
A new fossil bison from Texas.
Proc. Colorado Mus. Nat. Hist., VIII, 34-37, figs. 2, 3.

——— See also **Abel** and **Cook**; also **Matthew** and **Cook.**

Cooke, C. Wythe 1926 A
Fossil man and Pleistocene vertebrates in Florida.
Amer. Jour. Sci. (5), XII, 441-452.

Coolidge, Dane 1904 A
Ground-owl of the desert, a curious bird that lives in a chipmunk hole.
Country Life in America, V, 330-331, 3 text-figs.

Cooper, Bertram G. 1914 A
Note on flight of pterodactyls.
Aeronaut. Jour., XVIII, 342-343.

Cooper, Clive Forster 1920 A
Chalicotheroidea from Baluchistan.
Proc. Zool. Soc. Lond., 1920, 357-366, pl. i, 7 text-figs.

——. 1922 A
Macrotherium salinum sp. n., a new chalicothere from India.
Ann. Mag. Nat. Hist. (9), X, 542-544, 3 figs.

——— 1922 B
Metamynodon bugbiensis sp. n., from the Dera Bugti deposits of Baluchistan. Preliminary notice.
Ann. Mag. Nat. Hist. (9), IX, 617-620, 2 figs.

——— 1922 C
A case of secondary adaptation in a tortoise.
Ann. Mag. Nat. Hist. (9), X, 155-157.

——. 1922 D
Miocene Proboscidia from Baluchistan.
Proc. Zool. Soc. Lond., 1922, 609-626, pls. i-iv, 12 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, I, 134.

Cooper, Clive Forster—Cont'd 1923 A
Baluchitherium osborni(?) syn. *Indricotherium turgaicum,* Borrissyak.
Phil. Trans. Roy. Soc. Lond., CCXII, 35-66, 31 figs.
Numerous references to the literature in foot-notes.

—— 1923 B
Note on a lower jaw of an African elephant.
Ann. Mag. Nat. Hist. (9), XII, 263-264, 2 figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, II, 456.

—— 1924 A
On remains of extinct Proboscidea in the museums of geology and zoology in the University of Cambridge.
Proc. Cambridge Philos. Soc. (Biol. Sci.), I, 108-120, pls. vi-x, 6 text-figs.

—— 1924 B
On the skull and dentition of *Paraceratherium bugtiense,* a genus of aberrant rhinoceroses from the Lower Miocene deposits of Dera Bugti.
Phil. Trans. Roy. Soc. Lond., CXII, 369-394, 19 text-figs.

Cooper, James Graham 1873 A
Remarks on a tooth of *Archegosaurus?*
Proc. Calif. Acad. Sci. (1), IV, 194.

—— 1875 A
Remarks on California during the Pliocene epoch.
Proc. Calif. Acad. Sci., V, 389-392.

—— 1875 B
California in the Miocene epoch.
Proc. Calif. Acad. Sci., V, 401-404.

Cooper, W. F. 1906 A
Geological report on Bay County [Michigan].
Geol. Surv. Mich., 1905 (1906), 139-426, with maps.

Cooper (William), J. A. **Smith,** and J. E. **DeKay** 1831 A
Amer. Jour. Sci. (1), XX, 370-372.
Reprinted in Edinb. New Philos. Jour., XI, 352-355, 1831, and Monthly Amer. Jour. Geol., I, 43-44.

Cope, E. D. 1859 A
On the primary divisions of the Salamandridæ, with descriptions of two new species.
Proc. Acad. Nat. Sci. Phila., 1859, 122-128.

Cope, E. D.—Continued 1865 B
Sketches of the primary groups of *Batrachia salientia.*
Nat. Hist. Rev., V, 97-120.

—— 1867 F
Remarks on the contents of caves which abound in southwestern Virginia.
Proc. Acad. Nat. Sci. Phila., 1867, 137-138.

—— 1867 G
On the families of the raniform Anura.
Jour. Acad. Nat. Sci., Phila., V, 189-206.

—— 1867 H
On the discovery of remains of a gigantic dinosaur in the Cretaceous beds of New Jersey.
Ann. Mag. Nat. Hist. (3), XIX, 71.
Abstract of Cope, E. D., 1866 A.

—— 1868 N
A review of the Amblystomidæ.
Proc. Acad. Nat. Sci. Phila., 1867, 166-211.

—— 1869 P
Specimens of extinct reptiles.
Nature, I, 121-122.
Same as Cope, E. D., 1869 H.

—— 1870 U
[Exhibition of fossil fishes, a clupeid and a cyprinodont.]
Proc. Amer. Philos. Soc., XI, 316.
Names *Lithichthys pusillus* and *Cyprinodon levatus* proposed without descriptions.

—— 1871 F
The Port Kennedy bone cavern.
Proc. Amer. Philos. Soc., XII, 15.
Wrongly referred to volume XI in Hay, O. P., 1902 A, p. 42.

—— 1871 Q
Supplementary note on a new chimærid from New Jersey, *Leptomylus cookii* Cope.
Proc. Amer. Philos. Soc., XI, 384.

—— 1871 R
[Exhibition of spine referred to *Asteracanthus.*]
Proc. Amer. Philos. Soc., XI, 439-440.

—— 1871 S
Note on *Saurocephalus* Harlan.
Proc. Amer. Philos. Soc., XI, 608.

—— 1871 T
Contribution to the ichthyology of the Lesser Antilles.
Trans. Amer. Philos. Soc. (n.s.), XIV, 445-483, 10 figs.

Cope, E. D.—Continued 1872 J

On *Bathmodon*, an extinct genus of ungulates.

Proc. Amer. Philos. Soc., xii, pp. 417-420.

Correction of Cope, E. D., 1872 J, in Hay, O. P., 1902 A, p. 43.

—— 1872 NN

Descriptions of some new Vertebrata from the Bridger group of the Eocene.

Palaeont. Bull. No. 1, 1-6.

Same as Cope, E. D., 1872 M, but earlier and with typographical errors not corrected.

—— 1872 OO

Second account of the new Vertebrata from the Bridger Eocene.

Palaeont. Bull. No. 2, 1-3.

Same as Cope, E. D., 1872 N, with errors not corrected.

—— 1872 PP

Third account of new Vertebrata from the Bridger Eocene of Wyoming valley.

Palaeont. Bull. No. 3, 1-4.

Same as Cope, E. D., 1872 E, but earlier and with typographical errors not corrected.

—— 1872 QQ

On the existence of Dinosauria in the transition beds of Wyoming.

Palaeont. Bull. No. 4, 1-2.

Same as Cope, E. D., 1872 Q, but earlier and without correction of typographical errors.

—— 1872 RR

Notices of the Vertebrata from the upper waters of Bitter Creek, Wyoming Territory.

Palaeont. Bull. No. 6, 1-4.

Same as Cope, E. D., 1872 R, but earlier and with uncorrected errors.

—— 1872 SS

Second notice of extinct vertebrates from Bitter Creek, Wyoming.

Palaeont. Bull. No. 7, 1-2.

Same as Cope, E. D., 1872 S, but earlier and without correction of errors.

—— 1872 TT

On a new vertebrate genus from the northern part of the Tertiary basin of Green River.

Palaeont. Bull. No. 8, 1.

Same as Cope, E. D., 1872 U, but earlier.

—— 1872 UU

Descriptions of new extinct reptiles from the upper Green River Eocene basin, Wyoming.

Palaeont. Bull. No. 9, 1.

Same as Cope, E. D., 1872 V, but earlier.

Cope, E. D.—Continued 1872 VV

Remarks on the geology of Wyoming.

Palaeont. Bull. No. 10, 1-2.

Same as part of Cope, E. D., 1872 EE, but probably earlier.

—— 1873 B

On two new perissodactyles from the Bridger Eocene.

Proc. Amer. Philos. Soc., xiii, 35-36.

Also issued as Pal. Bull. No. 11.

—— 1873 E

See Hay, O. P., 1902 A, p. 44.

Notice, with list of species, in Jour. Zool. Paris, iii, 1874, 59-61.

—— 1873 EE

On two new perissodactyles from the Bridger Eocene.

Palaeont. Bull. No. 11, 1-2.

In part same as Cope, E. D., 1873 B, but earlier.

—— 1873 FF

On some of Professor Marsh's criticisms.

Palaeont. Bull. No. 13, 1-8.

Mostly same as Cope, E. D., 1873 X; probably earlier, but without date.

—— 1874 U

Notes on the Santa Fé marls, and some of the contained vertebrate fossils.

Palaeont. Bull. No. 18, 147-152.

Reprint from Proc. Acad. Nat. Sci., Phila., 1874, 147-152, but probably issued earlier. Without date, serial name and serial number.

—— 1875 Y

On the supposed Carnivora of the Eocene of the Rocky Mountains.

Proc. Acad. Nat. Sci. Phila., 1875, 444-448.

Same as Cope, E. D., 1876 A.

—— 1876 J

On the fossil remains of Reptilia and fishes from Illinois.

In Hay, O. P., 1902 A, 48, this paper is recorded as Cope, E. D., 1875 T. It was reprinted in Ann. Mag. Nat. Hist. (4), xvii, 178-184.

—— 1877 AA

Verbal communication on a new locality of the Green River shales containing fishes, insects, and plants in a good state of preservation.

Palaeont. Bull. No. 25, 1.

—— 1878 GG

A new deer from Indiana.

Amer. Naturalist, xii, 189.

In Hay, O. P., 1902 A, 51, the volume is, by misprint, given as iv.

Cope, E. D.—Continued 1878 II

Pliocene man.

Amer. Naturalist, XII, 125-126.

Includes a list of some species of fossil vertebrates found in Oregon.

—— 1878 JJ

The structure of *Coryphodon*.

Nature, XVIII, 67.

—— 1878 KK

On the saurians of the Dakota Cretaceous of Colorado.

Nature, XVIII, 476.

—— 1878 LL

On the remains of a Permian fauna in North America.

Nature, XVIII, 482.

—— 1880 U

Sur les relations des niveaux de vertébrés éteints dans l'Amérique du Nord et en Europe.

C. R. Congr. Internat. Geol., I, Paris, 1878, 144-163.

—— 1880 V

Pliocene man.

Amer. Naturalist, XIV, 60-62.

Discusses finding of human remains and artifacts reported by J. D. Whitney from auriferous gravels in California.

—— 1881 H

See Hay, O. P., 1902 A, p. 53.

Abstract in Neues Jahrb. Min. Geol. Pal., 1883, II, Ref., 264-265.

—— 1881 X

Reprinted, with extracts from other articles on *Phenacodus*, in Geol. Mag. n. s. (3), III, 1886, 49-52.

—— 1882 M

See Hay, O. P., 1902 A, p. 55.

Reprinted in Ann. Mag. Nat. Hist. (5), IX, 211.

—— 1882 N

See Hay, O. P., 1902 A, p. 55.

Reprinted in Ann. Mag. Nat. Hist. (5), IX, 212.

—— 1884 KK

The evidence for evolution in the history of the extinct Mammalia.

Proc. Amer. Assoc. Adv. Sci., XXXII, 1883, Minneapolis, 32-48.

See also Cope, E. D., 1883 B and 1884 II. Reprinted 1883 as separate with pages 1-19.

Cope, E. D.—Continued 1885 BB

The genealogy of the Vertebrata as learned from paleontology.

Trans. Vassar Bros. Inst., Poughkeepsie, N. Y., II, 60-80.

—— 1885 CC

The retrograde metamorphosis of *Siren*.

Amer. Naturalist, XIX, 1226-1227.

—— 1885 DD

Batrachia.

Stand. Nat. Hist., III, 303-344, figs. 170-205.

—— 1885 EE

Origin of man and other vertebrates.

Pop. Sci. Month., XXVIII, 605-614, 3 figs.

—— 1885 FF

The energy of life, evolution, and how it acted.

Pop. Sci. Month., XVII, 789-800, 9 figs.

—— 1886 X

On the structure and affinities of the Amphiumidæ.

Proc. Amer. Philos. Soc., XXIII, 442-445; pls. vi, vii.

—— 1887 N

See Hay, O. P., 1902 A, p. 62.

Review in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 315-321.

—— 1888 E

See Hay, O. P., 1902 A, p. 62.

Abstract in Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 322-323.

—— 1891 B

See Hay, O. P., 1902 A, p. 65.

Abstract in Geol. Mag. (3), IX, 233-235.

—— 1892 CC

On degenerate types of scapular and pelvic arches.

Jour. Morphol., VII, 223-244, pl. xiii, 2 text-figs.

—— 1893 S

A supposed new order of gigantic fossils from Nebraska.

Amer. Naturalist, XXVII, 559-560.

Refers to the objects called *Daimonelix*.

—— 1895 G

The antiquity of man in North America.

Amer. Naturalist, XXIX, 593-599.

—— 1903 A

Letter to C. H. Sternberg dated Dec. 21st, 1889.

Science (n.s.), XVII, 871-872.

Cope, E. D., and W. D. **Matthew** 1915 A

Hitherto unpublished plates of Tertiary Mammalia and Permian Vertebrata. Prepared under the direction of Edward Drinker Cope for the U. S. Geological Survey of the Territories, with descriptions of plates by William Diller Matthew.

Published and distributed with the cooperation of the United States Geological Survey by the American Museum of Natural History. Monograph series number 2.

Abstracts in Rev. crit. Pa'éozool., XXI, 44-45; Geol. Zentralbl. XXVII, 222.

Cornay, J. E. 1847 A

Considérations générales sur la classification des oiseaux fondée sur la considération de l'os palatin antérieur.

Rev. Zool. Paris, X, 360-369.

Cornbury, Lord 1848 A

[Communication with regard to a tooth of a mastodon.]

Weld's History of the Royal Society London, I, 421.

Reprinted in 3d Ann. Rep. State Cabinet, New York, 1850, 156; Bull. 69 N. Y. State Mus., 1902 (1903), 926-929.

Corner, E. M. 1896 A

The processes of the occipital and mastoid regions of the skull.

Jour. Anat., Physiol. Lond., XXX, 286-389.

Corning, H. K. 1891 A

Die sog. Neugliederung der Wirbelsäule und das Schicksal der Urwirbelhöhle bei Reptilien.

Morphol. Jahrb., XVII, 611-622, pl. XXX.

Cornwall, Ira E. 1922 A

Some notes on the Sooke formation, Vancouver Island, B. C.

Canad. Field-Naturalist, XXXVI, 121-123, 4 figs.

Cossmann, Maurice 1899 A

Abstract of H. F. Osborn: The extinct rhinoceroses (Osborn, H. F., 1898 I).

Rev. crit. Paléozool., III, 81-83 *bis*.

—— 1899 B

Abstract of J. L. Wortman: The extinct Camelidæ of North America (Wortman, J. L., 1898 A).

Rev. crit. Pa'éozool., III, 83 *bis*.

Cossmann, Maurice—Continued 1899 C

Abstract of F. A. Lucas: The characters of *Bison occidentalis* (Lucas, F. A., 1899 B).

Rev. crit. Paléozool., III, 85.

—— 1900 A

Abstracts of Broili, F., 1899 A and Riggs, E. S., 1899 A.

Rev. crit. Paléozool., IV, 51, 54.

—— 1901 A

Abstract of Lucas, F. A., 1900 D and of Wortman, J. L., 1899 A.

Rev. crit. Paléozool., V, 2.

—— 1901 B

Abstracts of papers by Osborn (Osborn, H. F., 1898 F, 1898 G, 1898 H, 1899 A, and 1900 I).

Rev. crit. Paléozool., V, 186-189.

—— 1907 A

Rectifications de nomenclature.

Rev. crit. Paléozool., XI, 64.

Coues, Elliott 1868 A

A monograph of the Alcidæ.

Proc. Acad. Nat. Sci. Phila., 1868, 2-81, 16 text-figs.

—— 1870 A

Antero-posterior symmetry, with special reference to the muscles of the limbs.

Med. Record, N. Y., V, 149-152, 193-195, 222-224, 272-274, 297-299, 370-372, 390-391, 438-440.

Review in Amer. Jour. Sci. (3), II, 59-61.

—— 1875 D

Synopsis of the Muridæ of North America.

Proc. Acad. Nat. Sci. Phila., XXVI, 1874 (1875), 173-196.

This paper appears to have been issued Dec. 15, 1874.

—— 1877 C

Precursory notes on American insectivorous mammals, with descriptions of new species.

Bull. U. S. Geol. Geog. Surv. Terrs., III, 631-653.

—— 1883 A

Natural history of mammals. Rodentia.

Stand. Nat. Hist., V, 68-133, figs.

Coulon, L. 1903 A

Les poissons fossiles du Musée d'histoire naturelle d'Elbeuf, avec notes spéciales sur les espèces de la Seine-inférieure.

Bull. Soc. Sci. nat. Elbeuf, XXI, 99-162, 2 pls.

Couper, J. H. 1843 A

On fossil bones found in digging the New Brunswick Canal in Georgia.

Proc. Geol. Soc. London, IV, 33-35.

Coupin, Henri 1904 A

Un mammouth en peau trouvé dans les glaces de la Sibérie.

Le Naturaliste, XXVI, 101-102.

Cox, E. T. 1871 A

Martin County [Indiana].

Geol. Surv. Ind., 2d Rep. 81-117.

—— 1875 A

Geology of Gallatin and Saline Counties [Illinois].

Geol. Surv. Ill., VI, 197-234.

—— 1875 B

Jackson County [Indiana].

Geol. Surv. Ind., 6th Ann. Rep., 41-75.

Coyle, Ray F. 1909 A

The development of the auditory ossicles in the horse, with a note on their possible homologues in the lower Vertebrata.

Proc. Roy. Soc. Edinb., XXIX, 582-601, pls. i-v, 4 text-figs.

Appended is a bibliography of 32 titles.

Cragin, F. W. 1900 A

The capricorns, mammals of an Asiatic type, former inhabitants of the Pike's Peak region.

Colorado Coll. Stud., VIII, 21-26, 1 text-fig.

—— 1900 B

The discovery of a goat antelope in the cave fauna of Pike's Peak region.

Science (n.s.), XI, 219.

Abstract in Geol. Centralbl., II, 119.

—— 1901 A

A study of some teleosts from the Russell substage of the Platte Cretaceous series.

Colorado Coll. Stud., IX, 25-38, pls. i-iii.

Describes and figures *Syllæmus latifrons* Cope, *Pelecorapis varius* Cope and *P. microlepis* Crag.

Abstract in Geol. Centralbl., III, 59.

Cramer, Frank 1895 A

On the cranial characters of the genus *Sebastodes* (rock-fish).

Proc. Calif. Acad. Sci. (2), V, 573-610, pls. lvii-lxx.

Cramer, Zadok 1808 A

[Account of fossil bones taken from Big Bone Lick, Ky.].

The Navigator, etc., ed. VI, Pittsburgh, 1808, 69.

In edition viii, 1814, 260, is said to occur Dr. Goforth's account of bones taken from the locality mentioned.

Crane, Agnes 1881 A

Notes on the habits of the manatee.

Proc. Zool. Soc. Lond., 1881, 456-460, 1 fig.

Creaser, Charles W., 1926 A

The structure and growth of the scales of fishes in relation to the interpretation of their life-history, with special reference to the sunfish *Eupomotis gibbosus.*

Misc. Publ. Mus. Zool. Univ. Mich., No. 17, 1-82, 1 pl.

The bibliography records 72 titles.

Credner, H. 1882 B

Über einige Stegocephalen (Labyrinthodonten) aus dem sächssichen Rothliegenden.

Sitz.-Ber. naturf. Ges. Leipzig, VIII, 1-7.

—— 1882 C

Über *Branchiosaurus amblystomus.*

Sitz.-Ber. naturf. Ges. Leipzig, VIII, 43.

—— 1886 A

Abstract in Geol. Mag. (3), IV, 276.

—— 1889 A

See Hay, O. P., 1902 A, p. 72.

Abstract by Dames in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 436-437.

—— 1893 A

Die Stegocephalen und Saurier aus dem Rothliegenden des Plauen'schen Grundes bei Dresden.

Zeitschr. deutsch. Geol. Ges., XLV, 639-704, pls. xxx-xxxii, 2 text-figs.

Tenth part: On *Sclerocephalus labyrinthicus.*

Creevey, Caroline A. 1899 A

What is the size of the largest known geologic animal?

Pop. Sci., XXXIII, 41.

Cresson, Hilbourne T. 1890 A

New evidence of the contemporaneity of man with the mastodon and mammoth.

Proc. Bost. Soc. Nat. Hist., XXIV, 469.

Crook, A. R. 1926 A
Elephas primigenius boreus in Illinois.
Geol. Soc. Amer. Prelim. list, XXXIX, 13-14 (abstract).
See also Bull. Geol. Soc. Amer., XXXVIII, 1927, 137.

—— 1927 A
Elephant hunting in Illinois.
Scient. Amer., Jan., 1927, 24, 3 figs.

—— 1927 B
Elephas primigenius boreus Hay, at Golconda, Illinois.
Trans. Ill. Acad. Sci., XIX, 288-299, 13 figs.
Reprinted with pagination 1-22, figs. 1-13.
Abstract in Amer. Jour. Sci. (5), XIV, 250.

Crook, C. V. 1901 A
Abstract of Traquair, R. H., 1899 A.
Geol. Centralbl., I, 119.

Cross, Whitman 1888 A
The Denver Tertiary formation.
Proc. Colorado Sci. Soc., III, 119-133.

—— 1896 A
Post-Laramie and Tertiary Geology. Arapahoe formation, Denver formation. Age of the Arapahoe and Denver formations.
Mon. U. S. Geol. Surv., XXVII, 151-252.

—— 1899 A
Description of the Telluride quadrangle.
Folio U. S. Geol. Surv., LVII, 1-18, with maps and figures.

—— 1899 B
Description of the La Plata quadrangle.
Folio U. S. Geol. Surv., LX, 1-14, with maps and figures.

—— 1905 A
Description of the Silverton quadrangle.
Folio U. S. Geol. Surv., CXX, 1-34, with maps and figs.

—— 1905 B
Description of the Rico quadrangle.
Folio U. S. Geol. Surv., CXXX, 1-20, with maps and figs.

—— 1905 C
Description of the Needle Mountain quadrangle.
Folio U. S. Geol. Surv., CXXXI, 1-13, with maps and figs.

—— 1907 A
Stratigraphic results of a reconnaissance in western Colorado and eastern Utah.
Jour. Geol., XV, 634-679, 11 text-figs.

Cross, Whitman—Continued 1907 B
Description of the Ouray quadrangle.
Folio U. S. Geol. Surv., CLIII, 1-20, maps and figures.

—— 1908 A
The Triassic portion of the Shinarump group, Powell.
Jour. Geol., XVI, 97-123.
27 publications are cited.

—— 1909 A
The Laramie formation and the Shoshone group.
Proc. Wash. Acad. Sci., XI, 27-45.

—— 1910 A
Description of the Engineer Mountain quadrangle.
Folio U. S. Geol. Surv., CLXXI, 1-13, maps and figs.

——, and Ernest **Howe** 1905 A
Red Beds of southwestern Colorado and their correlation.
Jour. Geol., XVI, 447-498, pls. lxxxii-lxxxv, 4 text-figs.

Cuatápara, J. N., and Santiago **Ramirez** 1875 A
Description de un mamifero fósil de especie desconocida perteneciente al genero "Glyptodon."
Bol. Soc. Geogr. Estad. Rep. mex. (3), II, 354-362, with pl.

Culver, Harry E. 1927 A
Mastodon remains in Washington (State).
Science (n.s.), LXVI, 541-542.

Cummins, W. F. 1892 A
Report on the geography, topography, and geology of the Llano Estacado, or Staked Plains.
Geol. Surv. Texas, III, 127-223, with map and plates.

—— 1893 A
Notes on the geology of northwest Texas.
Geol. Surv. Texas, IV, 177-238, 6 text-figs.
The determination of the species is to be credited to E. D. Cope.

—— 1908 A
The localities and horizons of Permian vertebrate fossils in Texas.
Jour. Geol., XVI, 737-745.
Abstract in Geol. Centralbl., XIII, 489.

Cunningham, Joseph Thomas 1886 A
Salmonidæ.
Encyclop. Brit., 9th ed., XX, 221-227.

Cunningham, J. T.—Cont'd 1897 A
Recapitulation.
Sci. Progress, VI, 483-510.
This paper discusses the doctrine of recapitulation in embryology.

—— 1904 A
Incipient horns in horses.
Field, London, CIII, 777, 1 fig.

—— 1905 A
Zones of growth in the skeletal structures of Gadidæ and Pleuronectidæ.
Rep. Fish. Board Scotland, XXIII, pt. iii, 125-140, pls. vii-ix.

—— 1906 A
Remarks upon a horse bearing horn-like structures.
Proc. Zool. Soc. Lond., 1905, II, 323-324.

—— 1912 A
Fishes.
Cunningham's "Reptilia, Amphibia, fishes, and lower Chordata" (Vol. 3 of Pycraft's "Animal life; an evolutionary natural history"), 231-440, pls. xx-xxxii, text-figs. 18-31.

—— 1920 A
Discussion on the zoological position and affinities of *Tarsius*.
Proc. Zool. Soc. Lond., 1919 (1920), 495-496.

——, and G. A. **Boulenger** 1912 A
Amphibia.
Cunningham's "Reptilia, Amphibia, fishes, and lower Chordata" (Vol. 3 of Pycraft's "Animal life; an evolutionary natural history"), 157-230, pls. xiii-xix, text-figs. 13-17.

Cushing, H. P. 1912 A
The age of the Cleveland shale of Ohio.
Amer. Jour. Sci. (4), XXXIII, 581-584.
Abstr. in Geol. Centralbl., XIX, 88-89.

Cushman, Joseph A. 1904 A
A new footprint from the Connecticut Valley.
Amer. Geologist, XXXIII, 154-156, pl. vi.
See abstract in Geol. Centralbl., VII, 620.

—— 1907 A
Types in the paleontological collections of the Boston Society of Natural History.
Proc. Bost. Soc. Nat. Hist., XXXIII, 249-275.

Cutler, I. E. 1924 A
The reptilian fowls—a study in atavistic heredity.
Anat. Record, XXIX, 144.

Cuvier, Frédéric 1807 A
Essai sur de nouveaux caractères pour les genres des mammifères.
Ann. Mus. hist. nat. Paris, X, 105-129, pls. v, vi.

—— 1807 B
Du genre *Paca cælogenus* (*Cavia paca Lin.*).
Ann. Mus. hist. nat. Paris, X, 203-209, pl. ix.

—— 1808 A
Suite du mémoire intitulé: Essai sur de nouveaux caractères pour les genres des mammifères.
Ann. Mus. hist. nat. Paris, XII, 27-51, pl. iii.

—— 1812 A
Suite du mémoire intitulé: Essai sur de nouveaux caractères pour les genres des mammifères.
Ann. Mus. hist. nat. Paris, XIX, 268-295.

—— 1822 A
Considérations sur les caractères génériques de certaines familles de mammifères, appliquées aux marmottes (*Arctomis marmotta* et *Arctomis empetra*) et au souslik (*Arctomis citillus*), et formation du genre spermophile.
Mém. Mus. hist. nat. Paris, IX, 293-305, 2 pls.

—— 1822 B
Examen des espéces du genre porc-épic, et formation des genres ou sous-genres Acanthion, Eréthizon, Sinéthère et Sphiggure.
Mém. Mus. hist. nat. Paris, IX, 413-437, pls. i, ii.

—— 1824 A
De quelques espèces de phoques et des groupes génériques entre lesquels elles se partagent.
Mém. Mus. hist. nat. Paris, XI, 174-214, pls. xii-xv.

—— 1825 A
Des dents des mammifères considérées comme caractères zoologiques.
8vo., i-lv+1-259 pages, 103 pls.

—— 1836 A
De l'histoire naturelle des cétacés.
Paris, 1836, 8vo., i-lii+1-416 pages, pls. i-xxii.

—— 1906 A
Une lettre de Frédéric Cuvier à Richard Harlan, 1825.
Bull. Mus. hist. nat. Paris, XII, 134-136.
A letter dated January 10, 1826, published by E. T. Hamy, with a brief comment.

Cuvier, George 1799 B

Extrait d'un mémoire sur les ossemens fossiles de quadripèdes.

Bull. Soc. Philom. Paris, I, 90.

—— 1800 A

Leçons d'anatomie comparee.

For citations see Cuvier, G., 1805 A. They differ only in the year.

—— 1801 A

Extrait d'un mémoire sur les dents des poissons.

Bull. Soc. Philom. Paris, III, 25-26.

The paper is signed C. Cuvier.

—— 1803 A

Recherches d'anatomie comparée sur les dents.

Bull. Soc. Philom., Paris, III, 165-168.

The paper is signed C. Cuvier.

—— 1804 C

Description ostéologique du tapir.

Ann. Mus. hist. nat. Paris, III, 122-131, pl. i.

—— 1804 D

Sur quelques dents et os trouvés en France qui paroissent avoir appartenu a des animaux du genre du tapir.

Ann. Mus. hist. nat. Paris, III, 132-143, pls. ii-v.

—— 1804 E

Des animaux qui diffèrent du *Palæotherium* pour le genre, mais qui sont de même ordre, et particuliérement du genre *Anoplotherium,* et de ses espèces.

Ann. Mus. hist. nat. Paris, III, 370-382, pls. viii-xiii.

—— 1805 A

Leçons d'anatomie comparée.

Paris, 1805, 8vo., I, i-xxxi+1-522 pages, 9 tables, vol. II, i-xvi; 1-699.

Tables i-iii of the first volume present a classification of the Vertebrata and Latin names for the genera are employed.

The first edition was published in 1800, but citations are not made from it. The two editions seem not to differ.

—— 1806 A

Sur les elephans vivants et fossiles.

Ann. Mus. hist. nat. Paris, VIII, 1-58, 93-155, 249-269, pls. xxxviii-xlv.

—— 1806 D

Memoir upon living and fossil elephants.

Tilloch's Philos. Mag., XXVI, 1806, 158-169, 204-211, 302-314; XXVIII, 1807, 258-264, 359-366, pls. vi-viii; XXIX, 1808, 52-65, 244-254, pl. vi; XXX, 1808, 15-25, pls. ii-v.

An English translation from Ann. Mus. hist. nat. Paris, VIII, 1-58, 93-155; 249-269.

Cuvier, George—Continued

—— 1807 A

Sur les différentes espèces de crocodiles vivans et sur leurs caractères distinctifs.

Ann. Mus. hist. nat. Paris, X, 8-66, pl. i.

—— 1807 B

A la classe des sciences physiques et mathématiques de l'Institut.

Ann. Mus. hist. nat. Paris, X, 381-386.

—— 1808 C

Observations sur l'ostéologie des crocodiles vivans.

Ann. Mus. hist. nat. Paris, XII, 1-26, pls. i, ii.

Abstract in Isis von Oken, II, 1818, 289-291.

—— 1808 D

Sur les ossemens fossiles de crocodiles, et particulièrement sur ceux des environs du Havre et de Honfleur, avec des remarques sur les squelettes des sauriens de la Thuringe.

Ann. Mus. hist. nat. Paris, XII, 73-110, pls. x, xi.

—— 1809 A

De quelques rongeurs fossiles, principalement du genre des castors qui se sont trouvés dans des tourbes ou dans des alluvions, et de quelques autres rongeurs enfermés dans des schistes.

Ann. Mus. hist. nat. Paris, XIV, 47-55, pl. vii.

—— 1809 B

Recherches sur les espèces vivantes de grands chats, pour servir de preuves et d'eclaircissemens au chapitre sur les carnassiers fossiles.

Ann. Mus. hist. nat. Paris, XIV, 136-164, pls. xv, xvi.

—— 1812 A

Sur la composition de la tête osseuse dans les animaux vertébrés.

Ann. Mus. hist. nat. Paris, XIX, 123-128.

Abstract in Isis, II, 118, 283-285.

—— 1814 A

Mémoire sur la composition de la machoire supérieure des poissons et sur le parti qu'on peut en tirer pour la distribution méthodique de ces animaux.

Bull. Soc. Philom. Paris, 1814, 73-78.

Cuvier, George—Continued 1815 A
Mémoire sur la composition de la mâchoire supérieure des poissons, et sur le parti que l'on peut en tirer pour la distribution méthodique de ces animaux.
Mém. Mus. hist. nat. Paris, I, 102-132.
Abstract in Isis, II, 1818, 285-289, 1059-1072.

——— 1825 A
Recherches sur les ossemens fossilles.
Third edition, in five volumes; the fifth in two parts.
This edition is said to be identical with the third, which was published in parts from 1821 to 1824.

——— 1827 A
Sur le genre de reptiles batraciens nommé *Amphiuma* et sur une nouvelle espèce de ce genre (*Amphiuma tridactylum*).
Mém. Mus. hist. nat. Paris, XIV, 1-14, pls. i, ii.

———, and E. F. **Géoffroy St. Hilaire** 1796 A
Sur les espèces d'éléphans.
Bull. Soc. Philom. Paris, I, 90.

Dabbene, Roberto 1910 A
Ornitología Argentina.
An. Mus. Nac. Buenos Aires (3), XI, 1-513 pages, 87 text-figs., 1 map.

Dabelow, Adolph 1926 A
Beiträge zur phylogenetischen und ontogenetischen Entwicklung des Skleralringes der Sauropsiden.
Verh. Anat. Ges. Versamml., XXXV, 95-102, 11 figs.

Dachnowski, Alfred 1912 A
Peat deposits of Ohio; their origin, formation and uses.
Geol. Surv. Ohio, ser. 4, Bull. 16, i-viii+1-424 pages, pls. i-viii, map, 29 text-figs.

Dahl, Knut 1909 A
The assessment of age and growth in fish.
Internat. Rev. Hydrobiol. Hydrogr., 1909, II, 758-769, 6 text-figs.
The important literature is cited.

Dahms, P. 1901 A
Der Biber.
Naturw. Wochenschr., XVI, 249-257, 273-279.

Daiber, Marie 1920 A
Das Bauchrippensystem von *Sphenodon* (*Hatteria*) *punctatus* Gray.
Anat. Anz., LIII, 371-382, 2 pls.
There are 33 titles in the bibliography.

Dal Piaz, G. 1900 A
Sopra alcuni resti di *Squalodon* dell' arenaria miocenica di Belluno.
Palaeont. ital., VI, 303-314, pls. xxvi-xxix, and 1 text-fig.; with citations of literature.

——— 1903 A
Sugli avanzi di *Cyrtodelphis sulcatus* dell' arenaria di Belluno.
Palaeont. ital., IX, 187-219, pls. i-iv, 16 text-figs.

——— 1904 A
Neosqualodon nuovo genere della famiglia degli Squalodontidi.
Mém. Soc. pal. Suisse, XXXI, art. 5, 1-21, 1 pl.

——— 1905 A
Sugli avanzi di *Cyrtodelphis sulcatus* dell' arenaria di Belluno. Pt. 2.
Palaeont. ital., XI, 253-279, pls. xviii-xxi (v-viii), text-figs. 17-26.

——— 1916 A
Gli Odontoceti del Miocene bellunese. IV: *Eoplatanista italica.*
Mem. Inst. Geol. Univ. Padova, V, art. 2, 1-23, pls. i, ii.

——— 1917 A
Gli Odontoceti del Miocene bellunese. III: *Squalodelphis fabianni.*
Mem. Inst. Geol. Univ. Padova, V, art. 1, 1-34, pls. i-v.

Dall, W. H. 1868 A
Observations on Alaska.
Proc. Calif Acad. Sci. (1), IV, 30-37, with wood-cut.

——— 1870 A
Alaska and its resources, by William H. Dall, director of the scientific corps of the late Western Union Telegraph Expedition.
Boston, 1870, i-xii+1-627 pages, with map.

——— 1870 B
On the bones of the buffalo and musk-ox found in Yukon.
Proc. Boston Soc. Nat. Hist., XIII, 136.

——— 1881 A
Extract from a report to C. P. Patterson, Supt. Coast and Geodetic Survey.
Amer. Jour. Sci. (3), XXI, 104-111, a map.
Quoted in Bull. U. S. Geol. Surv., LXXXIV, 261-263.

——— 1891 A
Age of the Peace Creek bone beds of Florida.
Proc. Acad. Nat. Sci. Phila., 1891, 120.

Dall, W. H.—Continued 1894 A

Notes on the Miocene and Pliocene of Gay Head, Martha's Vineyard, Mass., and on the "Land phosphate" of the Ashley River district, South Carolina.

Amer. Jour. Sci. (3), XLVIII, 296-301.

—— 1896 A

Report on coal and lignite of Alaska.

Rep. U. S. Geol. Surv., XVII, pt. 1, 763-875, pls. xlvii-lviii.

Pleistocene geology and paleontology are discussed on pages 850-864.

—— 1898 A

A table of the North American Tertiary horizons correlated with one another and with those of western Europe, with annotations.

Rep. U. S. Geol. Surv., XVIII, pt. 2, 323-348, with a correlation table.

—— 1901 A

Former land connections between Asia and North America.

Science (n.s.), XIII, 307-308.

—— 1909 A

The Miocene of Astoria and Coos Bay, Oregon.

U. S. Geol. Surv. Profess. Pap., LIX, 1-20.

——, and G. D. **Harris** 1892 A

Correlation papers, Neocene.

Bull. U. S. Geol. Surv., LXXXIV, 1-349, pls. i-iii, 43 text-figs.

Dames, W. 1883 C

Reviews of Zittel, K. A., 1882 A; Dollo, L., 1882 A; Dollo, L., 1882 B; Owen, R., 1883 A; Hulke, J. W., 1883 B.

Neues Jahrb. Min. Geol. Pal., 1883, II, Ref., 268-273, 398-399.

—— 1898 A

Abstract of O. P. Hay, 1895 B.

Neues Jahrb. Min. Geol. Pal., 1898, II, 140.

—— 1898 B

Abstract of O. C. Marsh: The Reptilia of the Baptanodon beds (Marsh, O. C., 1895 A).

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 141-142.

—— 1898 C

Abstract of A. S. Woodward: The problem of the primæval sharks (Woodward, A. S., 1895 B).

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 330-331.

Dames, W.—Continued 1898 D

Abstract of O. C. Marsh: Amphibian footprints from the Devonian (Marsh, O. C., 1896 G).

Neues Jahrb. Min. Geol. Pal., 1898, I, Ref., 149.

—— 1898 E

Review of C. R. Eastman: On the relations of certain plates in the dinichthyds (Eastman, C. R., 1897 D).

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 527-530, 2 figs.

—— 1898 F

The structure and habits of the Plesiosauria.

Nat. Sci., XII, 48-51, pl. iii.

—— 1899 A

Abstract of J. Z. Gilbert: On the skull of *Xerobates* (*?*) *undata* Cope (Gilbert, J. Z., 1898 A).

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 365.

—— 1899 B

Review of G. Baur: The *Stegocephali*. A phylogenetic study.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 365-366.

—— 1899 C

Abstract of S. W. Williston: Notice of some vertebrate remains from the Kansan Permian (Williston, S. W., 1897 B).

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 366.

—— 1899 D

Review of S. W. Williston: Range and distribution of the mosasaurs, with remarks on synonymy (Williston, S. W., 1897 F).

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 552-553.

—— 1899 E

Review of S. W. Williston: Restoration of *Ornithostoma* (*Pteranodon*) (Williston, S. W., 1897 A).

Neues Jahrb. Min. Geol. Pal., 1899, Ref., II, 553.

—— 1899 F

Review of C. R. Eastman: *Tamiobatis vetustus*, a new form of fossil skate (Eastman, C. R., 1897 A).

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 555-556.

Dames, W.—Continued 1899 G

Review of C. R. Eastman: On the characters of *Macropetalichthys* (Eastman, C. R., 1897 C).

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 556-557, 1 fig.

—— 1899 H

Abstract of S. W. Williston: A new labyrinthodont from the Kansan Carboniferous (Williston, S. W., 1897 G).

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 152.

—— 1899 I

Abstract of A. Stewart: A contribution to the knowledge of the ichthyic fauna of the Kansas Cretaceous (Stewart, A., 1898 A).

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 155-156.

Dana, J. D. 1849 A

Fossils from northwestern America.

U. S. Expl. Exp., Geology of, App. 1, 722-730, pl. xvi.

Reprinted without the plates in Professional paper 59, U. S. Geol. Surv., p. 152.

Recorded the finding of bones of cetaceans and of fishes in an argillaceous sandstone at Astoria, Oregon. A fish was supposed to be related to *Trigla*. The other remains were not identified.

—— 1863 A

On cephalization, and on Megasthenes and Microsthenes, in classification (being a continuation of an article on the higher subdivisions in the classification of mammals.

Amer. Jour. Sci. (2), xxxvi, 1-10.

—— 1863 B

On certain parallel relations between the classes of vertebrates, and on the bearing of these relations on the question of the distinctive features of the reptilian birds.

Amer. Jour. Sci. (2), xxxvi, 315-321.

—— 1863 C

The classification of animals based on the principle of cephalization.

Amer. Jour. Sci. (2), xxxvi, 321-352.

—— 1863 D

On the discovery of *Archæopteryx*.

Amer. Jour. Sci. (2), xxxv, 129-132.

Daniel, J. Frank 1914 A

The anatomy of *Heterodontus francisci*. I: The exoskeleton.

Univ. Calif. Publ., Zool., XIII, 147-166, pls. viii, ix, 4 text-figs.

Daniel, J. Frank—Continued 1915 A

The anatomy of *Heterodontus francisci*. II: The endoskeleton.

Jour. Morphol., XXVI, pp. 447-476, pls. i-viii, 3 text-figs.

—— 1916 A

The anatomy of *Heptanchus maculatus*. The endoskeleton.

Univ. Calif. Publ. Zool., XVI, 349-370, pls. xxvii-xxix, 8 text-figs.

—— 1922 A

The elasmobranch fishes.

Univ. Calif. Press, i-xi+1-334 pages, 260 figs.

Bibliographies are on pages 16-20, 40-42, 85-89, 118-122, 146-149, 162-163, 202-204, 227-228, 259-267, 295-299, 325-332.

Dareste, C. 1872 A

Sur les affinités naturelles des poissons de la famille des balistes.

C. R. Acad. Sci., Paris, LXXIV, 1527-1530. See also Jour. Zool. Paris, I, 268-272.

—— 1872 B

On the natural affinities of the Balistidæ.

Ann. Mag. Nat. Hist. (4), x, 68-71.

Reprinted from C. R. Acad. Sci. Paris LXXIV, 1527-1530.

Darrach, James 1847 A

[Letter on the mastodon, with measurements.]

Eager's "History of Orange County, N. Y.," 74-75.

—— 1852 A

Account of exhumation of mastodon.

In J. C. Warren's "The Mastodon giganteus of North America," Ed. 1, 1852, 172-174.

Dart, Raymond A. 1923 A

The brain of the Zeuglodontidæ (Cetacea).

Proc. Zool. Soc. Lond., 1923, 615-648, 652-654, 21 text-figs. With a note by C. W. Andrews.

The bibliography includes 60 titles.

Darton, Nelson H. 1901 A

Preliminary description of the geology and water resources of the southern half of the Black Hills and adjoining regions in South Dakota and Wyoming.

Rep. U. S. Geol. Surv., XXI, pt. iv, 489-599, pls. lviii-cxii, text-figs. 272-299.

—— 1905 A

Preliminary report on the geology and underground water resources of the central Great Plains.

U. S. Geol. Surv., Profess. paper No. xxxii, 1-433, 90 illustrations.

Darton, Nelson H.—Continued 1906 A
Fish remains in Ordovician rocks in Bighorn Mountains, Wyoming, with a résumé of Ordovician geology of the northwest.
Bull. Geol. Soc. Amer., XVII, 541-566, pls. lxxiii-lxxix, 6 text-figs.

——— 1908 A
Paleozoic and Mesozoic of central Wyoming.
Bull. Geol. Soc. Amer., XIX, 403-470, pls. xxi-xxx.

——— 1909 A
Discovery of fish remains in Ordovician of the Black Hills, South Dakota.
Bull. Geol. Soc. Amer., XIX, 567-568 (abstract).

——— 1910 A
A reconnaissance of parts of northwestern New Mexico and northern Arizona.
Bull. U. S. Geol. Surv., CDXXXV, 1-88, with maps and figs.

——— 1915 A
Guidebook of the western United States. Part C: The Santa Fe route, with a side trip to the Grand Canyon of the Colorado.
U. S. Geol. Surv., Bull. DCXIII, 1-194, 24 sheets, 42 pls. and 40 figs.
Abstract in Jour. Wash. Acad. Sci., v, 634.

———, and C. E. **Siebenthal** 1910 A
Postcambrian sedimentary rocks.
U. S. Geol. Surv. Folio CLXXIII, 5-11, with maps and figs.

Daubenton, Louis Jean Marie 1762 A
Mémoire sur des os et des dents remarquables par leur grandeur.
Mém. Acad. Sci., France, 1762 (1764), 206-229, pls. xiii-xiv.

Daubeny, Charles 1844 A
On the occurrence of fluorine in recent as well as in fossil bones.
Edinb. New Philos. Jour., XXXVII, 288-294.
Reprinted from Philos. Mag. Jour. Sci., XXV, 122.

Davenport, Gertrude C. 1898 A
Agassiz's work on the embryology of the turtle.
Amer. Naturalist, XXXII, 187-188.

Davidoff, M. 1879 A
Beiträge zur vergleichenden Anatomie der hinteren Gliedmasse der Fische.
Morphol. Jahrb., V, 450-520, pls. xxviii-xxxi.
For remarks by Gegenbaur on this paper see pages 521-525 of the same volume.

Davidson, Alvin 1895 A
A contribution to the anatomy and phylogeny of *Amphiuma means*.
Jour. Morphol., XI, 375-410, pls. xxiii, xxiv.

——— 1897 A
A preliminary contribution to the development of the vertebral column and its appendages.
Anat. Anz., XIV, 6-12, 7 figs.

Davidson, Pirie 1919 A
A cestracionť spine from the Middle Triassic of Nevada.
Bull. Dept. Geol. Univ. Calif., XI, 433-435, 2 text-figs.
Abstracts in Rev. crit. Paléozool., Paris, XXIV, 149; Geol. Zentralbl., XXIX, 477.

——— 1923 A
Alticamelus alexandræ, a new camel from the Barstow Upper Miocene of the Mohave Desert.
Bull. Dept. Geol. Univ. Calif., XIV, 397-408, 16 figs.
Abstracts in Rev. crit. Paléozool., XXVIII, 99, 1924; Geol. Zentralbl., XXXI, 218.

Davies, H. R. 1889 A
Die Entwicklung der Feder und ihre Beziehungen zu anderen Integumentbilden.
Morphol. Jahrb., XV, 560-645, pls. xxiii-xxvi.
With numerous citations of the literature.

Davies, W. 1863 A
Holoptychius v. *Glyptolepis*.
Geologist, VI, 135-136.

Davis, J. W. 1880 C
On the fish-remains found in the Cannel Coal in the Middle Coal-measures of the West Riding of Yorkshire, with the description of some new species.
Quart. Jour. Geol. Soc., XXXVI, 56-67, 3 figs.

——— 1881 B
On *Anodontacanthus*, a new genus of fossil fishes from the Coal-measures; with descriptions of three new species.
Quart. Jour. Geol. Soc., XXXVII, 427, 428, pl. xxii.

——— 1881 C
On *Palæospinax priscus* Egerton.
Ann. Mag. Nat. Hist. (5), VII, 429, 432, pl. xx.

Davis, J. W.—Continued 1884 A

On some remains of fossil fishes from the Yoredale series at Leyburn in Wensleydale.

Quart. Jour. Geol. Soc., XL, 614-635, pls. xxvi, xxvii.

—— 1892 A

See Hay, O. P., 1902 A, p. 75.

Review in Geol. Mag. (3), X, 72-75.

Dawkins, W. B. 1865 A

On the dentition of *Hyæna spelæa*, and its varieties.

Nat. Hist. Rev., V, 80-96, 6 figs.

—— 1878 A

Contributions to the history of the deer of the European Miocene and Pliocene strata.

Quar. Jour. Geol. Soc., XXXIV, 402-420, 17 text-figs.

Abstract in Nature, XVII, 255.

—— 1885 A

On a skull of *Ovibos moschatus* from the sea-bottom.

Quart. Jour. Geol. Soc., XLI, 242-244, 1 fig.

—— 1887 A

The British Pleistocene Mammalia. Part 6. British Pleistocene Cervidæ.

Pages 1-29, pls. i-vii. 4to. Palæontog. Soc., London.

—— 1915 A

The classification of the Tertiary strata by means of the eutherian mammals.

Geol. Mag. (6), II, 520-521 (Abstract).

Dawson, Alden B. 1925 A

The ossicle at the sternal end of the clavicle in the albino rat; the homologue of the sternal epiphysis of the clavicle in man.

Anat. Record, XXX, 205-210, 2 figs.

The bibliography presents 12 titles.

Dawson, George M. 1857 A

On the newer Pliocene and Post-Pliocene deposits of the vicinity of Montreal, with notices of fossils recently discovered in them.

Canad. Natural. Geol., II, 401-426, 2 text-figs.

—— 1884 A

Report on the region in the vicinity of the Bow and Belly Rivers, Northwest Territory.

Rep. Geol. Nat. Hist. Surv. Canada, 1882-1884, C, 1-156, with maps.

Dawson, George M.—Continued 1893 A

Notes on the occurrence of mammoth remains in the Yukon district of Canada and in Alaska.

Nature, XLIX, 94.

—— 1894 A

Abstracts in Geol. Mag. (3), X, 574-575; Canad. Rec. Sci., VI, 59.

—— 1899 A

Summary report on the operations of the Geological Survey for the year 1898, by the Director.

Rep. Geol. Surv. Canad., XI, 1A-208A.

—— 1901 A

Summary report on the operations of the Geological Survey for the year 1900.

Rep. Geol. Surv. Canad., XIV, 1A-203A.

Dawson, J. W. 1854 A

On the Coal-measures of South Joggins, Nova Scotia.

Quart. Jour. Geol. Soc., X, 1-42, 25 figs.

Appended is a list of 24 papers referring to this subject.

—— 1863 F

Superficial geology of Canada.

Rep. Geol. Surv. Canad., 1863, 886-930.

In Hay, O. P., 1902 A, page 144, this article is wrongly credited to W. E. Logan.

—— 1870 B

Note on some animal remains from the Carboniferous and Devonian of Canada.

Nature, I, 271.

—— 1872 B

The Post-Pliocene geology of Canada.

Canad. Natural. Geol. (n.s.), VI, 19-42, 166-187, 241-259, 369-416, map, pls. ii-vii.

See Dawson, J. W., 1872 C.

—— 1872 C

Notes on the Post-Pliocene geology of Canada; with especial reference to the conditions of accumulation of the deposits and the marine life of the period.

Montreal, 8vo., i-vi+1-112 pages, map, pls. ii-vii.

See Dawson, J. W., 1872 B.

—— 1888 A

Microsauria and *Dendrerpeton*.

Nature, XXXVII, 393.

Dawson, J. W.—Continued 1894 C

The Canadian ice age. Being notes on the Pleistocene geology of Canada, with especial reference to the life of the period and its climatic conditions.

Montreal, 8vo., i-x+1-301 pages, 10 pls., several text-figs.

—— 1894 D

Notes on the occurrence of mammoth remains in the Yukon district of Canada and in Alaska.

Quart. Jour. Geol. Soc. Lond., L, 1-9.

Day, E. C. H. 1865 A

On a head of *Hybodus delabechei*.

Geol. Mag., II, 565.

Day, Henry 1915 A

A note on the parasphenoid of a palæoniscoid.

Ann. Mag. Nat. Hist. (8), XVI, 421-434, 3 text-figs.

Dean, Bashford 1891 A

Abstract in Geol. Mag. (3), VIII, 513.

—— 1893 E

Contributions to the anatomy of *Dinichthys*.

Trans. N. Y. Acad. Sci., XII, 187-188 (Abstract).

—— 1895 B

Notes of the ancestral sharks.

Anat. Anz., XI, 424.

—— 1895 C

Notes on the early development of the ganoids, *Lepidosteus*, *Acipenser* and *Amia*.

Rep. Brit. Assoc. Adv. Sci., LXV, Ipswich, 1895, 734.

A brief abstract.

—— 1896 D

On the early development of ganoids.

C. R. Congr. internat. Zool., III, Leyde, 1895 (1896), 336-346.

—— 1900 A

The so-called Devonian lamprey, *Palæospondylus gunni;* with notes on the systematic arrangement of the fish-like vertebrates.

Mem. N. Y. Acad. Sci., II, 1-32, pl. 1, 1 text-fig.

Reviewed by C. R. Eastman, Jour. Geology, VIII, 286-289.

—— 1900 B

The Jay Terrell collection of fossil fishes.

Amer. Mus. Jour., I, 10-12, 1 text-fig.

A popular account of the dinichthyids.

Dean, Bashford—Continued 1900 C

On the embryology and phylogeny of *Chimæra*.

Science (n.s.), XI, 169-170.

—— 1901 A

On two new arthrodires from the Cleveland shale of Ohio.

Mem. N. Y. Acad. Sci., II, 87-100, pls. ii-vi, 2 text-figs.

Abstracts in Geol. Centralbl., III, 122; Neues Jahrb. Min., Geol., Pal., 1903, I, Ref., 339-342; Rev. crit. Paléozool., VI, 68.

—— 1901 B

On the characters of *Mylostoma* Newberry.

Mem. N. Y. Acad. Sci., II, 101-109, pls. vii, viii, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 339-342; Geol. Centralbl., III, 116; Rev. crit. Paléozool., VI, 68.

—— 1901 C

Further notes on the relationships of the Arthrognathi.

Mem. N. Y. Acad. Sci., II, 110-123, text-figs. 11-18.

Abstracts in Geol. Centralbl., III, 121; Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 339-342; Rev. crit. Paléozool., VI, 68.

—— 1902 A

Historical evidence as to the origin of the paired limbs of vertebrates.

Amer. Naturalist, XXXVI, 767-776, 1 text-fig.

Abstracts in Geol. Centralbl., IV, 297; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 313-314; Rev. crit. Paléozool., VII, 75-76.

—— 1902 B

Biometric evidence in the problem of the paired limbs of the vertebrates.

Amer. Naturalist, XXXVI, 837-847, with 1 text-fig.

Abstract in Geol. Centralbl., IV, 297.

—— 1902 C

Review of O. P. Hay's "Bibliography and catalogue of the fossil Vertebrata of North America." (Hay, O. P., 1902 A.)

Science (n.s.), XVI, 701-703.

—— 1902 D

The preservation of muscle-fibres in sharks of the Cleveland shale.

Amer. Geologist, XXX, 273-278, pls. viii, ix.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 478; Geol. Centralbl., IV, 300; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 89.

—— 1903 A

An outline of the development of a chimæroid.

Biol. Bull., IV, 270-286, 19 text-figs.

Dean, Bashford—Continued 1904 A

In the matter of the Permian fish *Menaspis*.

Amer. Geologist, xxxiv, 49-53, pl. ii.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 159.

—— 1904 B

L'oeuf de *Chimæra colliei* et l'adaptation de sa capsule.

C. R. Soc. Biol. Mém., lvii, 14-15.

—— 1904 C

Fossil fishes in the American Museum of Natural History.

Science (n.s.), xix, 437.

—— 1904 D

Review of Traquair's "The Lower Devonian Fishes of Gemünden."

Science (n.s.), xix, 64-65.

—— 1904 E

Evolution in a determinate line as illustrated by the egg-cases of chimæroid fishes.

Biol. Bull., vii, 105-112.

—— 1906 A

Notes on the living specimens of the Australian lungfish, *Ceratodus forsteri*, in the Zoological Society's collection.

Proc. Zool. Soc. Lond., 1906, 168-178, pl. ix, text-figs. 53-55.

—— 1906 B

Chimæroid fishes and their development.

Publ. Carnegie Instn. Wash. No. 32, 1-194, pls. i-xi, 144 text-figs.

The extensive bibliography occupies pages 159-172.

Reviewed in Amer. Naturalist, xli, 132-133; notice in Nature, lxxvi, 1907, 67; Rev. crit. Paléozool., xi, 90-93.

—— 1907 A

Dr. Eastman's recent papers on the kinship of the arthrodires.

Science (n.s.), xxvi, 46-50.

Abstract in Rev. crit. Paléozool., xii, 86-90.

—— 1907 B

Notes on acanthodian sharks.

Amer. Jour. Anat., vii, 209-222, 36 text-figs.

Abstract in Rev. crit. Paléozool., xii, 17-19.

—— 1908 A

Studies on fossil fishes during the year 1907.

Science (n.s.), xxvii, 201-205.

Dean, Bashford—Continued 1909 A

The giant of ancient sharks.

Amer. Mus. Jour., ix, 232-234, 1 fig.

Abstract in Geol. Centralbl., xiv, 339.

—— 1909 B

A review of Gaskell's "The origin of the Vertebrata."

Science (n.s.), xxix, 816-818.

—— 1909 C

Studies on fossil fishes (sharks, chimæroids and arthrodires).

Mem. Amer. Mus. Nat. Hist., ix, 211-287, pls. xxvi-xli, 65 text-figs.

On page 248 is a bibliography of 23 titles.

Abstracts in Geol. Centralbl., xv, 312; Rev. crit. Paléozool., 13, 211-213; Nature, lxxxv, 285.

—— 1911 A

Note on the Ohio placoderm *Dinichthys terrelli*.

Science (n.s.), xxxiv, 801.

—— 1911 B

Collecting fossil fishes in Ohio.

Amer. Mus. Jour., xi, 302-303, 2 figs.

—— 1912 A

Symposium on ten years progress in vertebrate paleontology. Paleozoic fishes.

Bull. Geol. Soc. Amer., xxiii, 224-228.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Eastman, Osborn, Williston and Sinclair.

—— 1912 B

Orthogenesis in the egg capsules of *Chimæra*.

Bull. Amer. Mus. Nat. Hist., xxi, 35-40, 2 figs.

—— 1914 A

Recent and extinct fishes.

Rep. Amer. Mus. Nat. Hist., xlv, 1913 (1914), 59-61.

A report of progress in the department of ichthyology and herpetology.

—— 1919 A

Memorial of Charles Rochester Eastman.

Bull. Geol. Soc. Amer., xxx, 27-36, portrait.

On pages 31-36 is a list of Eastman's published papers, more than 100 in number.

—— 1923 A

The department of fishes, American Museum; its aims and achievements.

Nat. Hist., xxiii, 606-615, with figs.

Dean, B., and R. **Eastman** 1916 A
A bibliography of fishes.
Vol. I, A-K, i-xii+1-718 pages.
Published by the American Museum of Natural History.
See Finding Index on pages 667 to 707 of volume III.

——, —— 1917 A
A bibliography of fishes.
Vol. II, L-Z, i-vi+1-701 pages.
Published by the American Museum of Natural History, New York.
See Finding Index on pages 667 to 707 of volume III.

——, E. W. **Gudger,** and A. W. **Henn** 1923 A
A bibliography of fishes.
Vol. III; indices, etc.; i-xvi+1-707 pages.
Published by the American Museum of Natural History, New York.
See Finding Index on pages 667-707.
Reviewed in Nat. Hist. XXIV, 392-395, 395-401, 523-525; Science, LX, 12-15.

Deane, J. 1845 A
Abstract in Quart. Jour. Geol. Soc., I, 141.

De Brahm, —— 1786 A
Description of bones, etc., from near the river Ohio.
Columbian Magazine [Philadelphia], I, 103-107, plate.
By Col. De Brahm, *fide* Samuel Mitchill in Cuvier's "Theory of the earth," 1818, 364.

De Burlet, H. M. See **Burlet,** H. M. de.

Dederer, Pauline H. 1909 A
Comparison of Cœnolestes with Polyprotodonta and Diprotodonta.
Amer. Naturalist, XLIII, 614-618, 2 text-figs.

Deecke, W. 1913 A
Paläontologische Betrachtungen. IV: Über Fische.
Neues Jahrb. Min. Geol. Pal., 1913, II, 69-92.

—— 1926 A
Über die Triasfische.
Palaeont. Zeitschr., VIII, 184-198.

Deeley, R. M. 1913 A
North American and European drift deposits.
Geol. Mag. (5), X, 14-17, with a folding plate.

Deere, E. O. 1908 A
A fossil tusk found in the Equus beds in McPherson County.
Trans. Kansas Acad. Sci., XXI, 115-117, 2 text-figs.
The tusk was supposed to be that of *Mammut americanum*, but no other parts were found.

Degener, Lyda May 1924 A
The development of the dentary bone and teeth of *Amia*.
Jour. Morphol., XXXIX, 113-139, pls. i-viii, 1 text-fig.
The bibliography presents 24 titles.

De Gregorio, Antonio 1916 A
Molari elefantini americani.
Naturalista Sicil., XXIII, 104.

DeHaas, Willis 1886 A
[Letter to Davenport Academy of Science on "elephant mounds."]
Proc. Davenport Acad. Sci., IV, 317-318.

Deichmüller, J. V. 1884 A
Branchiosaurus petrolei Gaudry sp. aus der unteren Dyas von Autun, Oberhof und Niederhässlich.
Mitt. Mus. Dresden, Heft 6, 1-17, 1 pl.

Deinse, A. B. van 1912 A
The sutura parietalis of the mammals.
Anat. Anz., XLI, 347-351, 1 text-fig.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 48.

—— 1914 A
Again the sutura parietalis of the mammals.
Anat. Anz., XLV, 289-300, 6 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 50.

—— 1916 A
Die Variationen im Visceralskelett von *Acanthias vulgaris*, über das Visceralskelett von *Lamna cornubica* und seine Kalkverdeckung.
Anat. Anz., XLIX, 417-449, 14 figs.
The bibliography comprises 7 titles.

—— 1916 B
Die Flossenversteifung der Cetaceen.
Anat. Anz., XLIX, 521-524, 4 figs.

De la Beche, H. T. 1848 A
Anniversary address before the Geological Society of London.
Quart. Jour. Geol. Soc., IV, XXI-CXX.

——, and W. D. **Conybeare** 1821 A
Notice of the discovery of a new fossil animal, forming a link between the *Ichthyosaurus* and the crocodile, together with general remarks on the osteology of the *Ichthyosaurus*.
Trans. Geol. Soc. Lond. (1), V, 559-594, pls. xxxiii-xlii.

Delafontaine, Marc. 1875 A
Les vertébrés fossiles des mauvaises terres du Nebraska, etc.
Arch. Sci. Phys. Nat., LIII, 169-176.

Delafontaine, Marc.—Continued 1877 A
Les *Dinichthys,* genre nouveau de poissons dévoniens.
Bull. Assoc. Sci. France, xx, 266-268.

—— 1877 B
Remarks on pteranodonts.
Arch. Sci. Phys. Nat., lix, 1877, 127.

Delsman, H. C. 1913 A
Der Ursprung der Vertebraten. Eine neue Theorie.
Mitt. Zool. Stat. Neapel, xx, 647-710, 9 text-figs.
The literature cited is listed on pages 706-710.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xix, pt. 3, 31.

—— 1924 A
The origin of vertebrates.
Amer. Jour. Sci. (5), viii, 151-158.

Demoll, R. 1921 A
Die Vererbbarkeit somatischer Erwerbungen.
Arch. Entwickl.-mech. Organ., xlvii, 443-451, pls. xv-xvi, 1 text-fig.

Dendy, Arthur 1899 A
Outlines of the development of the Tuatara, *Sphenodon* (*Hatteria*) *punctatus.*
Quart. Jour. Micr. Sci. (n.s.), xlii, 1-87, pls. i-x.
The list of references embraces 20 titles.

—— 1899 B
On the development of the parietal eye and adjacent organs in *Sphenodon* (*Hatteria*).
Quart. Jour. Micr. Sci. (n.s.), xlii, 111-153, pls. xi-xiii.
There are 38 titles in the list of references.

—— 1907 A
The pineal gland.
Sci. Progress, ii, 284-306, 4 figs.

Deniker, J. 1909 A
Autour du *Diplodocus.*
La Nature, ii, 221-222, 2 text-figs.

—— 1913 A
La nourriture du mammouth.
L'Anthropologie, xxiv, 117.

Deninger, K. 1913 A
Studien über die Stammesgeschichte der Proboscidier.
Zeitschr. indukt. Abstamm. Vererbl., x, 295-296.
A review of Schlesinger, G., 1912 A.

—— 1914 A
Skeletsystem. Paläontologisches.
Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 181-214.

Deninger, K.—Continued 1915 A
Skeletsystem. Paläontologisches.
Jahresber. Anat. Entwickl. (N.F.), xix, pt. 3, 181-191.
A list of 239 papers, without abstracts.

Denker, Alfred 1901 A
Zur Anatomie des Gehörorgans der Monotremata.
Semon's "Zool. Forschungsr. in Austral.," iii, 635-662, pls. xxi, xxii, 2 text-figs.

—— 1902 A
Zur Anatomie des Gehörorgans der Cetacea.
Anat. Hefte, Arb., xix, 421-448, pls. xiv, xv.
The bibliography notes titles of 10 papers.

Denton, William 1875 A
On an asphalt bed near Los Angeles, Cal., and its contained fossils.
Proc. Bost. Soc. Nat. Hist., xviii, 185-186.

DePauw, L. F. 1902 A
Contribution à l'étude de *l'Iguanodon bernissartensis.* Essai de reconstitution de l'iguanodon dans le milieu où il vivait.
Mém. Soc. Sci., Hainaut (6), iv, 85-95, pls. i-vi.

Dependorf, Theodor 1898 A
Zur Entwickelungsgeschichte des Zahnsystems der Marsupialier.
Semon's "Zool. Forschungsr. in Austral.," iii, 243-402, pls. ii-xi, 14 text-figs.
The bibliography embraces 65 titles.

—— 1907 A
Zur Frage der sogenannten Konkreszenztheorie.
Jena. Zeitschr. Naturwiss., xlii, 539-566, 19 text-figs.

—— 1907 B
Zur Frage der sogenannten Konkreszenztheorie. Eine Entgegnung auf Dr. Adloff's Aufsatz: "Zur Frage der Konkreszenztheorie."
Jena. Zeitschr. Naturwiss., xliii, 802-808.

—— 1907 C
Der Diphyodontismus der Säuger und die Stellung der Milchzahnreihe in diesem System.
Corresp.-Bl. Zahnärzte, xxxvi, 97-110.

Depéret, C. 1892 A
La faune de mammifères miocènes de la Grive-Saint-Alban (Isère).
Arch. Mus. hist. nat. Lyon, v, 1-95, pls. i-iv (See Hay, O. P., 1902 A, p. 79).

Depéret, C.—Continued 1896 A

Note sur les dinosauriens sauropodes et théropodes du Crétace supérieur de Madagascar.

Bull. Soc. géol. France (3), XXIV, 176-194, pl. vi, 2 text-figs.

—— 1900 A

Note sur de nouveaux dinosauriens du Crétacé supérieur de la Montagne-Noire.

Bull. Soc. géol. France (3), XXVIII, 530.
Abstract in Geol. Centralbl., I, 94. 1901.

—— 1901 A

Révision des formes européennes de la famille des hyracothéridés.

Bull. Soc. géol. France (4), I, 199-225, pls. iv, v.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1903, I, 351-353; Geol. Centralbl., II, 442; Rev. crit. Paléozool., VI, 1.

—— 1902 A

Sur les caractères craniens des *Lophiodon*.

Bull. Soc. géol. France (4), II, 323-324.
Abstract in Geol. Centralbl., III, 555.

—— 1902 B

Sur la patte antérieure des *Lophiodon*.

Bull. Soc. géol. France (4), II, 344.
Abstract in Geol. Centralbl., III, 555.

—— 1902 C

Les relations des tapirs, des *Coryphodon* et des *Lophiodon*.

Bull. Soc. géol. France (4), II, 344-345.
Abstracts in Geol. Centralbl., III, 555; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 119.

—— 1902 D

Sur les caractères craniens et les affinities des *Lophiodon*.

C. R. Acad. Sci., Paris, CXXXIV, 1278-1281, 2 figs.
Abstract in Geol. Centralbl., III, 117.

—— 1904 A

Sur les caractères et les affinités du genre *Chasmotherium* Rütimeyer.

Bull. Soc. géol. France (4), IV, 569-587, pl. xvi, 1 text-fig.

—— 1904 B

Études paléontologiques sur les *Lophiodon* du Minervois.

Arch. Mus. hist. nat. Lyon, IX, Mem. i, 1-49, pls. i-iv, 8 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, 465-468; Geol. Centralbl., V, 374; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 187-188.

Depéret, C.—Continued 1905 A

L'évolution des mammifères tertiaires, méthodes et principes.

C. R. Acad. Sci. Paris, CXL, 1517-1521.
Abstracts in Geol. Centralbl., VII, 491; IX, 765.

—— 1905 B

L'évolution des mammifères tertiaires. Réponse aux observations de M. Boule.

C. R. Acad. Sci. Paris, CXLI, 22-23.
Abstract in Geol. Centralbl., VII, 492; IX, 724.

—— 1905 C

L'évolution des mammifères tertiaires, importance des migrations.

C. R. Acad. Sci. Paris, CXLI, 702-705, 792.
Abstract in Geol. Centralbl., IX, 724.

—— 1906 A

L'évolution des mammifères tertiaires; importance des migrations.

C. R. Acad. Sci. Paris, CXLII, 618-620.

—— 1906 B

L'évolution des mammifères tertiaires; importance des migrations. Époque miocène.

C. R. Acad. Sci. Paris, CXLIII, 1120-1123.
Abstract in Geol. Centralbl., IX, 724.

—— 1907 A

Sur l'age des couches à *Palæomastodon* du Fayoum.

Bull. Soc. géol. France (4), VII, 455-456.

—— 1907 B

Les transformations du monde animal.

Paris, 1907, 1-360 pages.
Translated into German, 1909, with title: Die Umbildung der Tierwelt; 330 pages. Abstract of this in Neues Jahrb. Min. Geol. Pal., 1909, II, 311-319.

—— 1908 A

The evolution of the Tertiary mammals, and the importance of their migrations.

Amer. Naturalist, XLII, 109-114, 166-170, 303-307.
Extracts from C. R. Acad. Sci. Paris, CXLI, 1905, 702; CXLII, 1906, 618; CXLIII, 1906, 1120.

—— 1908 B

L'histoire géologique et la phylogénie des anthracothéridés.

C. R. Acad. Sci. Paris, CXLVI, 158-162.
Abstract in Geol. Centralbl., XI, 601.

Depéret, C.—Continued 1909 A
L'évolution des mammifères tertiaires; importance des migrations. Epoque pliocène.
C. R. Acad. Sci. Paris, CXLVIII, 140-143.
Abstract in Geol. Centralbl., XIII, 492.

—— 1911 A
Études sur la famille des lophiodontidés.
Bull. Soc. géol. France (4), X, 558-577, pl. VII.

—— 1912 A
Les échanges de faunes entre l'Europe et l'Amérique du Nord aux temps géologiques.
Proc. internat. Zool. Congr., VII, Boston, 1907, 703-713.

—— 1912 B
Sur un nouveau genre d'ongulés Éocenès, le *Lophiaspis,* de la famille des Lophiodontidés.
Proc. internat. Zool. Congr., VII, Boston, 1907, 769-770.

—— 1914 A
Sur la reconstitution d'un squelette de *Felsinotherium serresi,* sirénien pliocène des sables de Montpelier.
C. R. Acad. Sci. Paris, CLVIII, 1858-1862.

—— 1923 A
On proboscideans.
Nat. Hist., XXIII, 520.

——, and H. **Douxami** 1902 D
Les vertébrés oligocènes de Pyrimont-Challonges (Savoie).
Mém. Soc. pal. Suisse, XXIX, 1-91, pls. i-iv, 7 text-figs.
On pages 8, 9 is a bibliography of 38 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1904, I, 443-446.

——, and L. **Mayet** 1923 A
Les éléphants pliocenes. II: Monographie des éléphants pliocènes d'Europe et de l'Afrique du nord.
Ann. Univ. Lyon (n.s.), I, fasc. 42, 91-224, pls. vi-xi, text-figs. 16-33.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, I, 404-414.

——, and F. **Roman** 1920 A
Le *Felsinotherium serresi* des sables pliocènes de Montpelier et les rameaux phylétiques des siréniens fossiles de l'ancien monde.
Arch. Mus. hist. nat. Lyon, XII, Mem. iv, 1-56, pls. i-vii, 14 text-figs.
There is a bibliography of 46 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, II, 285-288.

Derjugin, Konst. Mich. 1909 A
Der Bau und die Entwickelung des Schultergürtels und der Brustflossen bei Teleostiern.
Trav. Soc. Naturalistes St. Petersb., XXXIX, No. 20, i-iv; 1-148, pls. i-vii, 13 text-figs.
The paper is printed in Russian. There is a bibliography of 111 titles.

—— 1910 A
Der Bau und die Entwicklung des Schultergürtels und der Brustflossen bei den Teleostiern.
Zeitschr. wiss. Zool., XCVI, 572-653, pls. xxvi-xxviii, 8 text-figs.
Followed by a list of 118 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 117-119.

—— 1910 B
Zur Frage über den Ursprung der paarigen Extremitäten.
Biol. Zeitschr. Moscou, I, 194-210.
This paper is in Russian; but an abstract of it in German occupies pages 206-210.

—— 1912 A
Bemerkungen über den Bau und die Entwicklung der paarigen Extremitäten der Knochenfische.
Anat. Anz., XLI, 457-460.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 164.

——, and E. **Rozhdestvensky** 1912 A
Über den Bau und die Entwicklung Bauchflossen bei den Teleostiern.
Anat. Anz., XLI, 643-647, 2 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 165.

Des Longchamps-Eudes. See **Eudes-Deslongchamps.**

Desmarest, A. G. 1822 A
Mammalogie ou description des especès de mammifères.
4to., i-viii+1-556 pages, 126 plates.
Part I of this work, comprising 276 pages, was published in 1820; Part II was published in 1822.

Desor, E. 1855 A
Letter on mastodons addressed to Thomas Dwight.
Warren's "Monograph on Mastodon," ed. 2, 159, 218.

De Stefani, C. 1921 A
Patologia di alcuni mammiferi pliocenici e postpliocenici della Toscano.
Atti Accad. Lincei. Rend. (5), XXX, 256-258.

De Stefano, Giuseppe 1903 A

I sauri del Quercy appartenenti alla collezione Rossignol.

Atti Soc. Ital. Sci. Nat., XLII, 382-418, pls. ix, x.

D'Eternod, A. C. F. See **Eternod,** A. C. F.

de Terra, Paul. See **Terra de,** Paul.

Deussen, Alexander 1924 A

Geology of the coastal plain of Texas west of Brazos River.

U. S. Geol. Surv. Profess. Pap., CXXVI, i-xii+1-139, pls. i-xxvi, 38 text-figs.

——, and R. B. **Dole** 1916 A

Ground water in Lasalle and McMullen Counties, Texas.

U. S. Geol. Surv. Water Supp. Pap. CCCLXXV, i-iv+141-181 pages, pls. viii, ix, 1 text-fig.

Dewey, Martin 1918 A

The function of tooth form.

Internat. Jour. Orthodon., IV, 141-169, 38 figs.

Dewitz, J. 1904 A

Bemerkungen zu Herrn E. P. Allis' Arbeit "The skull and the cranial and first spinal muscles and nerves in *Scomber scomber.*"

Anat. Anz., XXIV, 408-410.

Dexler, H., and L. **Freund** 1906 A

Zur Biologie und Morphologie von *Halicore dugong.*

Arch. Naturges., LXXII, Bd. i, 77-106, pls. x-xii, 1 text-fig.

Dibley, George Edward 1911 A

On the teeth of *Ptychodus* and their distribution in the English Chalk.

Quart. Jour. Geol. Soc., LXVII, 263-277, pls. xvii-xxii.

Abstract in Geol. Centralbl., XVI, 713; Nature, LXXXVI, 134.

Review in Rev. crit. Paléozool., XVI, 9.

Dice, Lee Raymond 1917 A

Systematic position of several American Tertiary lagomorphs.

Bull. Dept. Geol., Univ. Calif., X, 179-183, 6 text-figs.

Abstracts in Bull. Geol. Soc. Amer., XXVII, 169; Rev. crit. Paléozool. Paris, XXIV, 98; Geol. Zentralbl., XXIX, 474.

—— 1923 A

Notes on the fossil leporid genus *Panolax.*

Jour. Mamm., IV, 191-192.

—— 1923 B

Notes on *Praotherium palatinum* Cope.

Jour. Mamm., IV, 260.

Dice, Lee Raymond—Continued 1925 A

Rodents and lagomorphs of the Rancho La Brea deposits.

Publ. Carnegie Instn. Wash., No. 349, 119-130, 17 text-figs.

Dickeson, M. W. 1846 A

See Hay, O. P., 1902 A, p. 80. Abstract in Neues Jahrb. Min. Geol. Jahrg., 1848, 106; also in Ann. Mag. Nat. Hist. (1), XIX, 1847, 213-214.

Dieck, R. 1867 A

De sterno avium.

Dissertatio inauguralis. Halis Saxonum.

8vo., 1-31 pages.

Diener, C. 1909 A

Der Entwicklungsgedanke in der Paläontologie.

Schrift. Ver. Verbr. naturw. Kenntn. Wien, XLIX, 23-58.

—— 1912 A

Der Anteil des prähistorischen Menschen an der Verarmung der pleistozänen Tierwelt.

Mitt. Geol. Ges. Wien, V, 201-231.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 160-163.

Dieterich, Karl 1841 A

Fragmente zur genaueren Kenntniss der Schläfenbeine einiger schweizerischer Säugethiere.

Arch. Anat., Physiol. wiss. Med., 1841, 55-88, pl. iv.

Diethelm, Marzell 1907 A

Über osteologische Charakteristika der Strigiformes. Ein Beitrag zur Osteologie der Nachtraubvögel.

Inaugural-Dissertation, Bern. 8vo., 1-58 pages, 13 text-figs.

Dietrich, W. O. 1910 A

Neue fossile Cervidenreste aus Schwaben.

Jahresh. Ver. Naturk. Württemb., LXVI, 318-336, 5 text-figs.

This paper forms No. 71 of the Mitt. Nat. Kab. Stuttgart.

—— 1912 A

Elephas primigenius fraasi, eine schwäbische Mammutrasse.

Jahresh. Ver. Naturk. Wurttemb., LXVIII, 42-106, pls. i, ii, 26 text-figs.

This paper forms No. 78 of the Mitt. Nat. Kab. Stuttgart.

Abstract in Geol. Centralbl., XVIII, 234.

Review in Rev. crit. Paléozool., XVI, 219.

Dietrich, W. O.—Continued 1913 A

Zur Stammesgeschichte des afrikanischen Elefanten.

Zeitschr. indukt. Abstamm. Vererbl., x, 49-73, 7 text-figs.

Appended is a bibliography of 33 titles.

Abstracts in Naturw. Wochenschr. (n.s.), xii (xxviii), 1913, 760-761; Geol. Mag. (6), i, 93.

—— 1916 A

Elephas antiquus recki n. f. aus dem Diluvium Deutsch-Ostafrikas, nebst Bemerkungen des Extremitätenskeletts der Proboscidier.

Arch. Biontol., iv, Heft 1, 1-80, pls. i-viii, 6 text-figs.

There is on pages 5-8 a bibliography of 102 titles.

Abstract in Geol. Zentralbl., xxiii, 61.

—— 1919 A

Vergleichend kraniologische Bemerkungen über *Mastodon pentelici* G. and L.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1919, 45-61, 5 figs.

The bibliography is found in foot-notes.

—— 1921 A

Über den "horizontal Zahnwechsel" bei *Mastodon* und *Elephas*.

Centralbl. Min. Geol. Pal., 1921, 595-602, 4 figs.

Dietz, P. A. 1914 A

Beiträge zur Kenntnis der Kiefer- und Kiemenbogen-musculatur der Teleostier. I: Die Kiefer und Kiemenbogen der Acanthopterygier.

Mitt. Zool. Stat. Neapel., xxii, 99-162, 45 figs.

There is a bibliography of 10 titles.

—— 1917 A

Ueber die Herkunft der Teleostier.

Zool. Anz., xlix, 79-89.

—— 1921 A

Über die systematische Stellung der Gadidæ.

Mitt. Zool. Sta. Neapel, xxii, 433-457.

The bibliography comprises 13 titles.

Dieulafé and **Herpin** 1906 A

Dévelopment de l'os maxillaire inférieur.

Jour. Anat. Physiol. Paris, xlii, 239-252, 3 figs.

Diffenderfer, F. R. 1873 A

Elephas americana in Mexico.

Amer. Jour. Sci. (3), vi, 62.

Dijkstra, O. H. 1923 A

The development of the shoulder-blade in man.

Proc. Akad. Wet. Amsterdam, xxvi, 297-318, 11 figs.

Dilg, Carl 1909 A

Beiträge zur Kenntnis der Morphologie und postembryonalen Entwicklung des Schädels bei *Manatus inunguis* Natt.

Morphol. Jahrb., xxxix, 83-145, pls. viii-xiii, 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 39-41.

Diller, Joseph S. 1889 A

Geology of the Lassen Peak district.

Rep. U. S. Geol. Surv., viii (1886-87), pt. i, 395-432, pls. xlv-li, text-figs. 13-19.

—— 1896 A

A geological reconnaisance in northwestern Oregon.

Rep. U. S. Geol. Surv., xvii, pt. i, 441-520, pls. iv-xvi, text-figs. 4-17.

—— 1902 A

Topographic development of the Klamath Mountains.

Bull. U. S. Geol. Surv., cxcvi, 1-69, 13 pls.

—— 1906 A

Description of the Redding quadrangle.

Folio U. S. Geol. Surv., cxxxviii, 1-14, with maps.

—— 1911 A

The auriferous gravels of the Trinity River basin, California.

Bull. U. S. Geol. Surv., ccccl xx, 11-29, maps and sections.

Disselhorst, Rudolf 1906 A

Zur Morphologie und Anatomie der Halsanhänge beim Menschen und den Ungulaten.

Anat. Anz., xxviii, 321-327.

Ditmars, Raymond L. 1907 A

Growth of the alligator.

Rep. N. Y. Zool. Soc., xi, 143-154, 7 illustrations.

Dixey, F. A. 1881 A

On the ossification of the terminal phalanges of the digits.

Proc. Roy. Soc. Lond., xxxi, 63-71, pls. i, ii.

Dobson, G. E. 1882 A

On the phalanx missing from certain digits in the manus of Chiroptera.

Jour. Anat. Physiol. Lond., xvi, 200-201.

Dobson, G. E.—Continued 1883 B
On the natural position of the family Dipodidæ.
Proc. Zool. Soc. Lond., 1882 (1883), 640-641.

—— 1891 A
Note on the derivation and distribution of the Insectivora of the New World.
Proc. Zool. Soc. Lond., 1891, 349-351.

Döderlein, Ludwig 1900 A
Das Gastralskelett (Bauchrippen oder Parasternum) in phylogenetischer Beziehung.
Abh. Senckenb. naturf. Ges., xxvi, 329-336, pl. xxxi.

—— 1900 B
Ueber die Erwerbung des Flugvermögens bei Wirbelthieren.
Zool. Jahrb. Syst., xiv, 49-61.

—— 1902 A
Ueber the Beziehungen nahe verwandter "Thierformen" zu einander.
Zeitschr. Morphol. Anthrop., iv, 394-442.

Dohrer, Johann 1916 A
Die Entwicklung der Paukentasche bei *Chelydra serpentina.*
Morphol. Jahrb., l, 103-107, pl. vii.

Dohrn, Anton 1884 A
Studien zur Urgeschichte des Wirbelthierkörpers.
IV: Die Entwicklung und Differenzirung der Kiemenbogen der Selachier.
V: Zur Entstehung und Differenzirung der Visceralbogen bei *Petromyzon planeri.*
VI: Die paarigen und unpaaren Flossen der Selachier.
Mitt. Zool. Stat. Neapel, v, 102-195, pls. v-xi.

—— 1890 A
Bemerkungen über den neuesten Versuch einer Lösung des Wirbeltierkopf-Problems.
Anat. Anz., v, 53-64, 78-85.

Dollo, L. 1883 G
On the malleus of the Lacertilia, and the malar and quadrate bones of Mammalia.
Quart. Jour. Micr. Sci. (n.s.), xxiii, 579-596, pl. xli, 4 text-figs.

—— 1884 D
Note sur le batracien de Bernissart.
Bull. Mus. Roy. Hist. nat. Belgique, iii, 85-93, pl. iii.
With numerous references to the literature in foot-notes.

Dollo, L.—Continued 1884 E
Les epiphyses des lacertiliens.
Zool. Anz., vii, 65-70, 80-84.
Numerous references to the literature in foot-notes.

—— 1884 F
Notes erpétologiques.
Zool. Anz., vii, 547-548.

—— 1885 C
Revue des recueils périodiques. Paléontologie.
Rev. Quest. Sci., xvii, 293-324.

—— 1885 D
Revue des recueils périodiques. Vertébrés.
Rev. Quest. Sci., xvii, 617-637.

—— 1886 B
Première note sur les chéloniens landeniens (Eocène inférieur) de la Belgique.
Bull. Mus. Roy. Hist. nat. Belgique, iv, 129-142, 4 text-figs.
The bibliography is found in foot-notes.

—— 1887 B
On some Belgian fossil reptiles.
Geol. Mag. (3), iv, 392-396.

—— 1888 B
Abstract in Geol. Mag. (3), v, 520.

—— 1888 D
Abstract in Geol. Mag. (3), v, 519.

—— 1888 F
Sur la signification de la créte occipitale de *Pteranodon.*
Bull. Soc. belge Geol., ii, Proc.-verb., 79-80.

—— 1888 G
Sur l'humerus d'*Euclastes.*
Bull. Soc. belge Geol., ii, Proc.-verb., 107.

—— 1889 A
Les ptérosauriens.
Rev. Quest. Sci., xxv, 664-666.

—— 1889 B
Rhynchocéphaliens, chéloniens et crocodiliens vivants.
Rev. Quest. Sci., xxv, 666-678.
A review of Boulenger, G. A., 1889 A.

—— 1889 C
Brontops robustus.
Rev. Quest. Sci., xxv, 678-680.
A review of Marsh, O. C., 1889 A.

—— 1889 D
Les artiodactyles.
Rev. Quest. Sci., xxv, 680-681.
A review of Cope, E. D., 1888 X.

—— 1889 E
Le vol chez les vertébrés.
Rev. Quest. Sci., xxvi, 146-207.

Dollo, L.—Continued 1889 F

Les sélaciens fossiles.

Rev. Quest. Sci., XXVI, 333-342.

A review of Woodward, A. S., 1889 D.

—— 1889 G

Mammifères crétacés.

Rev. Quest. Sci., XXVI, 674-676.

A review of Marsh, O. C., 1889 D.

—— 1889 H

Dinosauriens d'Europe et d'Amérique.

Rev. Quest. Sci., XXVI, 676-680.

Review of Marsh, O. C., 1889 B.

—— 1889 I

Les proboscidiens.

Rev. Quest. Sci., XXVI, 680-686.

A review of Cope, E. D., 1889 J.

—— 1889 J

Gigantesque dinosaurien cornu du crétacé.

Rev. Quest. Sci., XXVI, 686.

An abstract of Marsh, O. C., 1889 E.

—— 1889 K

Première note sur les mosasauriens de Mesvin.

Bull. Soc. belge Géol., III, Mém., 271-304, pls. IX, X.

In foot-notes are numerous citations to the literature of the subject.

—— 1889 L

Première note sur les siréniens de Boom.

Bull. Soc. belge Géol., III, Proc.-verb., 415-421, 2 figs.

—— 1892 D

Sur la morphologie des côtes.

Bull. Sci. France Belgique, XXIV, 113-129.

—— 1892 E

Sur le bassin du champsosaure.

Bull. Sci. France Belgique, XXIV, 113-129. 158.

—— 1892 F

Première note sur les téléostéens du crétacé supérior de la Belgique.

Bull Soc. belge Géol., VI, Proc.-verb., 180-189, 4 figs.

—— 1893 D

Sur la morphologie de la colonne vertébrale.

Bull. Sci. France Belgique, XXV, 1-17.

—— 1893 E

Sur le *Lepidosteus suessoniensis*.

Bull. Sci. France Belgique, XXV, 193-197.

Dollo, L.—Continued 1893 F

Les lois de l'évolution.

Bull. Soc. belge Géol., VII, Proc.-verb., 164-166.

—— 1899 A

Les ancêtres de marsupiaux étaient-ils arboricoles?

Trav. Stat. zool. Wimereux, VII, 188-203.

Citations to the literature of the subject.

Abstract in Neues Jahrb. Min. Geol. Pal., II, Ref., 472-474.

—— 1900 A

Le pied du *Diprotodon* et l'origine arboricole des marsupiaux.

Bull. Scient. France Belgique, XXXIII, 275-280, 3 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 472-474.

—— 1901 A

Sur l'origine de la tortue luth (*Dermochelys coriacea*).

Bull. Soc. Sci. Linn., 1-26.

—— 1903 A

Eochelone brabantica, tortue marine nouvelle du Bruxellien (Eocène Moyen) de la Belgique et l'évolution des chéloniens marins.

Bull. Acad. Sci. Belgique, 1903, 792-850.

Reprint pages 1-62.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 473-477; Rev. crit. Paléozool., VIII, 82-83; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 169-170.

—— 1903 B

Les ancêtres des mosasauriens.

Bull. Sci. France Belgique, XXXVIII, 137-139.

Abstract in Jahresber. Anat. Entwickl., (N.F.), X, Abth. 3, 169; Geol. Mag. (5), II, 23.

—— 1903 C

Sur l'évolution des chéloniens marins (Considérations bionomiques et phylogéniques).

Bull. Acad. Sci. Belgique, 1903, 801-850.

—— 1903 D

Le *Pteraspis* dans l'Ardenne.

C. R. Acad. Sci. Paris, CXXXVI, 699-701.

Abstract in Rev. crit. Paléozool., VIII, 92.

—— 1904 A

Les mosasauriens de la Belgique.

Mem. Soc. belge Géol., XVIII, 207-216.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 168, and in Geol. Centrabl., VII, 496; Neues Jahrb, Min. Geol. Pal., 1905, II, Ref., 308-310; C. R. Acad. Sci. Paris, CXXXVI, 565; Geol. Mag. (5), II, 24.

Dollo, L.—Continued 1904 B

L'origine des mosasauriens.

Mém. Soc. belge Géol., XVIII, 217-222.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 169; Geol. Centralbl., VII, 496; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 308-310; Rev. crit. Paléozool., IX, 9-10; Geol. Mag. (5), II, 24.

—— 1904 C

Résultats du voyage du S. Y. *Belgica.*

Poissons. 1-239 pages, pls. v-xii, 6 text-figs., 4to., Antwerp.

—— 1905 A

Un nouvel opercule tympanique de *Plioplatecarpus*, mosasaurien plongeur.

Mém. Soc. belge Géol., XIX, 125-131, pl. iii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 308-310; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 166.

—— 1905 B

Les dinosauriens bipèdes retournés à l'état quadrupède.

Bull. Soc. belge Géol., XIX, Proc.-verb., 251.

—— 1906 A

Les dinosauriens adaptés a la vie quadrupède secondaire.

Mém. Soc. belge Géol., XIX, 441-448, pls. xi, xii, 1 text-fig.

Abstracts in Geol. Centralbl., VIII, 470; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 160.

—— 1906 B

Sur quelques points d'éthologie paléontologique relatifs aux poissons.

Bull. Soc. belge Géol., Proc.-verb., XX, 135-137.

Abstract in Sci. Progress, II, 524.

—— 1906 C

Les allures des iguanodons, d'après les empreintes des pieds et de la queue.

Bull. Sci. France Belgique, XL, 1-12, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 310-311; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 160.

—— 1907 A

Le pied de *l'Amphiproviverra* et l'origine arboricole des marsupiaux.

Bull. Soc. belge Géol., Proc.-verb., XX, 166-168.

—— 1907 B

Les ptyctodontes sont des arthrodères.

Mém. Soc. belge Géol., XXI, 97-108, pl. ii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 477; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 164.

Dollo, L.—Continued 1907 C

L'audition chez les ichthyosauriens.

Bull. Soc. belge Géol., Proc.-verb., XXI, 157-163, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 440; Sci. Progress, II, 517.

—— 1907 D

Nouvelle note sur les reptiles de l'Eocène inférieur de la Belgique et des régions voisines (*Eosuchus lerichei* et *Eosphargis gigas*).

Bull. Soc. belge Géol., XXI, Proc.-verb., 81-85.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), XIII, 170; Sci. Progress, II, 518.

—— 1908 A

Notolepis coatsi, poisson pélagigue nouveau recueilli par l'Expédition Antarctique Nationale Ecossaise.

Proc. Roy. Soc. Edinb., XXVIII, 58-64, with a bibliography of 25 titles.

—— 1909 A

The fossil vertebrates of Belgium.

Ann. N. Y. Acad. Sci., XIX, 99-119, pls. iv-x.

—— 1909 B

Les téléostéens à ventrales abdominales secondaires.

Verh. zool.-bot. Ges. Wien, LIX, (135-140).

Brief review in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 477.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 157.

—— 1910 A

La paléontologie éthologique.

Mém. Soc. belge Géol., XXIII, 377-421, pls. viii-x, 13 text-figs.

—— 1913 A

Podocnemis congolensis; tortue fluviatile nouvelle du montien (paléocène inférieur) du Congo et l'évolution des chéloniens fluviatiles.

Ann. Mus. Congo belge Géol., (3), I, 47-65, pl. vii, and 3 text-figs.

—— 1913 B

Globidens fraasi, mosasaurien mylodonte nouveau du Maestrichtien (Crétacé supérieur) du Limbourg, et l'éthologie de la nutrition chez les mosasauriens.

Arch. Biol., XXVIII, 1913, 609-626, pls. xxiv, xxv.

Brief abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 152; Nature, XCII, 695.

—— 1914 A

Sur la découverte de téléosauriens tertiaires au Congo.

Bull. Acad. Sci. Belgique, 286-298.

Dollo, L.—Continued 1919 A

Les vertébrés vivants et fossiles de la Musée Royal d'Histoire naturelle, Bruxelles.

Extrait du Guide illustré des Musées de Bruxelles édité par le Touring Club de Belgique. 1-35 pages, with figs.

Not dated. 1919 here assumed.

—— 1922 A

Les céphalopodes déroulés et l'irréversibilité de l'évolution.

Bijdr. Dierk. Amsterdam, XXII, (Feestnum. Max Weber), 215-226, pl. vii.

With numerous citations of the literature.

—— 1923 A

Saniwa orsmælensis, varanide nouveau du Landénien supérieur d'Orsmael (Brabant).

Bull. Soc. belge Géol., XXXIII, 76-82.

Bibliography in foot-notes.

Abstracts in Rev. Géol. et Sci. conn., V, 128-129; in Rev. crit. Paléozool., XXVIII, 23, 1924; Geol. Zentralbl., XXX, 442; XXXII, 122.

—— 1923 B

Le centenaire des iguanodons (1822-1922).

Phil. Trans. Roy. Soc. Lond., CCXII, 67-78, pl. iv.

Numerous citations of the literature in foot-notes.

Abstract in Geol. Zentralbl., XXX, 447.

—— 1923 C

L'*Emys camperi* est une tortue marine.

Bull. Acad. Sci. Belgique, 1923, 416-426.

In foot-notes are numerous citations of the literature of the subject.

—— 1924 A

Globidens alabamaensis mosasaurien américain retrouvé dans la Craie d'Obourg (Sénonien supérieur) du Hainaut, et les mosasauriens de la Belgique en général.

Arch. Biol., XXXIV, 167-213, pls. iv, v.

The bibliography (p. 191) presents 21 titles; many others in foot-notes.

——, and P. T. de **Chardin** 1924 A

Les gisements de mammifères paléocènes de la Belgique.

Quart. Jour. Geol. Soc., LXXX, 12-16.

References to the literature in foot-notes.

Dombrowsky, Bronislaw A. 1913 A

Ueber den Knochenfund des *Elasmosaurus* beim Chutor Lyssow im Dongebiet.

Annuaire Geol. Min. Russie, XV, 5-7, 6 text-figs.

This is a résumé in French of an article (pages 1-5) printed in Russian.

Dombrowsky, B. A.—Cont'd 1918 A

The tympanic cavity of Anura and spiraculum of fishes.

Rev. Zool. Russe, II, 197-205, figs. 1-8.

Pages 197-204 contain the Russian text and figures. The abstract (pages 204-205) is in English.

There is a bibliography of 6 titles.

—— 1925 A

Über einige Gesetzmässigkeiten im Aufbau des Schalleitenden- und Kieferapparates der Tetrapoden.

Zeitschr. Anat. Entwicklungsges., Abt. I, LXXV, 69-81, 6 figs.

The bibliography lists 19 titles.

Dopp, Katharine E. 1904 A

The tree-dwellers.

Science (n.s.), XX, 20-23.

Doran, Alban H. G. 1878 A

Morphology of mammalian ossicula auditûs.

Trans. Linn. Soc. Lond. (2), I, 371-497, pls. lviii-lxiv.

Dorlodot, H. de 1912 A

Sur la signification des *Pteraspis* du Gedinnien de l'Ardenne et du Condroz.

Bull. Soc. belge Géol., XXVI, Proc.-verb., 21-39.

—— 1912 B

Réplique à M. Leriche sur la signification géologique des *Pteraspis.*

Bull. Soc. belge Géol., XXVI, Proc.-verb., 64-65.

Dormitzer, M. 1852 A

Die Wirbelsäule der Fische.

Lotos, Prag, II, 60-63.

Douglass, Earl 1900 A

Abstract in Geol. Centralbl., XIII, 241.

—— 1900 B

Abstract in Geol. Centralbl., II, 88.

—— 1901 A

New species of *Merycochœrus* in Montana. Part II.

Amer. Jour. Sci. (4), XI, 73-83, 5 text-figs.

Abstract in Geol. Centralbl., II, 731.

—— 1901 B

Fossil Mammalia of the White River beds of Montana.

Trans. Amer. Philos. Soc. (2), XX, 237-279, 1 map, pl. lx.

Also issued as a separate, pages 1-43.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 425-428; Geol. Centralbl., III, 115; Rev. crit. Paléozool., IX, 67.

—— 1902 A

Dinosaurs in the Ft. Pierre shales and underlying beds in Montana.

Science (n.s.), XV, 31-32.

Abstract in Geol. Centralbl., IX, 487.

Douglass, Earl—Continued 1902 B

The discovery of Torrejon mammals in Montana.

Science (n.s.), xv, 272-273.

—— 1902 C

A Cretaceous and Lower Tertiary section in south central Montana.

Proc. Amer. Philos. Soc., xli, 207-224, pl. xxix.

Abstract in Geol. Centralbl., iv, 289.

—— 1903 A

New vertebrates from the Montana Tertiary.

Ann. Carnegie Mus., ii, 145-199, pl. ii, 37 text-figs.

Review in Rev. crit. Paléozool., ix, 67.

Abstract in Geol. Centralbl., v, 326.

—— 1905 A

The Tertiary of Montana.

Mem. Carnegie Mus., ii, 203-223, pl. xxii.

Abstracts in Geol. Centralbl., viii, p. 373; Rev. crit. Paléozool., x, 86; Sci. Progress, i, 451.

—— 1906 A

Generic names of merycoidodonts.

Science (n.s.), xxiv, 565-567.

Abstract in Geol. Centralbl., xi, 107.

—— 1907 A

New merycoidodonts from the Miocene of Montana.

Bull. Amer. Mus. Nat. Hist., xxiii, 809-822, with 9 text-figs.

Abstract in Geol. Centralbl., xi, 380.

—— 1907 B

Merycochœrus, and a new genus of merycoidodonts, with some notes on other Agriochœridæ.

Ann. Carnegie Mus., iv, 84-98, pl. xxi.

Abstract in Geol. Centralbl., xi, 378-380; Sci. Progress, ii, 509.

—— 1907 C

Some new merycoidodonts.

Ann. Carnegie Mus., iv, 99-109, pls. xxii-xxx.

Abstract in Geol. Centralbl., xii, 220.

—— 1908 A

Rhinoceroses from the Oligocene and Miocene deposits of North Dakota and Montana.

Ann. Carnegie Mus., iv, 256-266, pls. lxiii-lxiv, 7 text-figs.

Abstracts in Geol. Centralbl., xii, 595; Rev. crit. Paléozool., xii, 229; Amer. Jour. Sci. (4), xxvii, 93-94.

Douglass, Earl—Continued 1908 B

Fossil horses from North Dakota and Montana.

Ann. Carnegie Mus., iv, 267-277, pls. lxv-lxviii.

Abstracts in Geol. Centralbl., xii, 596; Rev. crit. Paléozool., xii, 231; Amer. Jour. Sci. (4), xxvii, 94.

—— 1908 C

Some Oligocene lizards.

Ann. Carnegie Mus., iv, 278-285, 8 text-figs.

Abstracts in Geol. Centralbl., xii, 599; Neues Jahrb. Min. Geol. Pal., 1910, i, Ref., 467; Amer. Jour. Sci. (4), xxvii, 94.

—— 1908 D

Vertebrate fossils from the Fort Union beds.

Ann. Carnegie Mus., v, 11-26, pls. i, ii.

Abstract in Geol. Centralbl., xiii, 202-393.

—— 1908 E

A hunt for extinct animals.

Guide to Nature, i, 1-8, 8 figs.

—— 1909 A

Dromomeryx, a new genus of American ruminants.

Ann. Carnegie Mus., v, 457-479, pls. lix-lxiii, 3 text-figs.

Abstract in Geol. Centralbl., xiv, 488-489.

—— 1909 B

Description of a new species of *Procamelus* from the Upper Miocene of Montana, with notes upon *Procamelus madisonius* Douglass.

Ann. Carnegie Mus., v, 159-165, pls. ix-xi, 2 text-figs.

Reviewed in Amer. Jour. Sci. (4), xxviii, 411.

—— 1909 C

A geological reconnaissance in North Dakota, Montana, and Idaho; with notes on Mesozoic and Cenozoic geology.

Ann. Carnegie Mus., v, 211-288, pls. xv-xxi.

—— 1910 A

Preliminary descriptions of some new titanotheres from the Uinta deposits.

Ann. Carnegie Mus., vi, 304-313, pls. xiii-xv, 8 text-figs.

Abstract in Geol. Centralbl., xvii, 39.

Douthitt, Herman 1917 A

Eryops; Eryopsoides, gen. nov. from the New Mexican Permian.

Kansas Univ. Sci. Bull., x, 237-242.

Abstracts in Rev. crit. Paléozool. Paris, xxiv, 88.

Douthitt, Herman—Continued 1917 B
The structure and relationships of *Diplocaulus.*
Contrib. Walker Mus., II, 1-41, pls. i, ii, 7 text-figs.
There is a bibliography of 15 titles.

Douxami, H., and C. **Depéret.** See **Depéret** and **Douxami.**

Drayton, John 1802 A
A view of South Carolina as respects her natural and civil concerns.
Charleston, 1802, 1-253 pages, with plates.

Drevermann, F. 1904 A
Über *Pteraspis dunensis* F. Roem. sp.
Zeitschr. deutsch. Geol. Ges., LVI, 275-289, pls. xix-xxi.

—— 1907 A
Die Präparation und Montierung des *Diplodocus*-Skeletts.
Ber. Senckenb. naturf. Ges., 1907, I, 152-154.

—— 1910 A
Diplodocus und seine Stellung. Erwiderung an G. Tornier.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 399-401.
Abstract in Sci. Progress, VI, 567.

—— 1910 B
Ein fossiler Hai.
Ber. Senckenb. naturf. Ges., XLI, 191-193, 1 pl.

—— 1911 A
Der Diplodocus.
Ber. Senckenb. naturf. Ges., XLII, 272-282, 5 pls., 1 text-fig.

—— 1911 B
Das Mastodon.
Ber. Senckenb. naturf. Ges., XLII, 13-17, 2 pls.

—— 1911 C
Das Iguanodon.
Ber. Senckenb. naturf. Ges., XLII, 97-101, 2 pls.

—— 1912 A
Ein Riesenfisch aus dem Weissen Jura.
Ber. Senckenb. naturf. Ges., XLIII, 4-6, 1 fig.

—— 1913 A
Der Triceratops.
Ber. Senckenb. naturf. Ges., XLIV, 10-13, 2 figs.

—— 1913 B
Phenacodus primævus Cope.
Ber. Senckenb. naturf. Ges., XLIV, 103-106, 1 fig.
Abstract in Geol. Centralbl., XX, 233.

Drevermann, F.—Continued 1913 C
Sinopa rapax Leidy.
Ber. Senckenb. naturf. Ges., XLIV, 199-202, 4 figs.
Abstract in Geol. Centralbl., XX, 525.

—— 1914 A
Die Meersaurier im Senckenbergischen Museum.
Ber. Senckenb. naturf. Ges., XLV, 1914, 35-48, 12 text-figs.

—— 1914 B
Über einen Schadel von *Trematosaurus.*
Centralbl. Min., Geol., Pal., 1914, 627-628.

—— 1915 A
Über Placodus.
Centralbl. Min. Geol. Pal., 1915, 402-405.

—— 1918 A
Ein Parasuchier-Schädel aus dem schwäbischen Stubensandstein.
Ber. Senckenb. naturf. Ges., XLVII, 120-123, 2 figs.

—— 1920 A
Ueber einen Schädel von *Trematosaurus brauni.*
Senckenbergiana, II, 83-110, 3 figs.
There are 25 titles in the bibliography.
Abstract in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 236-238.

—— 1922 A
Das Skelet der Placodontier.
Palaeont. Zeitschr., IV, 98-104.
The bibliography presents 12 titles.
Abstract in Geol. Zentralbl., XXXII, 182.

—— 1922 B
Discussion on *Trachodon.*
Palaeont. Zeitschr., IV, 91.

Drüner, L. 1902 A
Studien zur Anatomie der Zungenbein-, Kiemenbogen- und Kehlkopfmuskeln der Urodelen. I Theil.
Zool. Jahrb. Anat., XV, 435-622, pls. xxv-xxxi.

—— 1904 A
Ueber die Anatomie und Entwickelungsgeschichte des Mittelohres beim Menschen und bei der Maus.
Anat. Anz., XXIV, 257-289, 20 text-figs.

—— 1904 B
Studien zur Anatomie der Zungenbein-, Kiemenbogen- und Kehlkopfmusculatur der Urodelen. II Theil.
Zool. Jahrb., Anat., XIX, 361-690, pls. xiv-xxv, 44 text-figs.

Drüner, L.—Continued 1905 A

Über die Wirbeltheorie des Schädels.

Ber. Senckenb. naturf. Ges., 1905, I, 152-156.

—— 1906 A

Die Kiemenbögen der Wirbeltiere und ihre Abkömmlinge.

Ber. Senckenb. naturf. Ges., 1906, I, 6-10.

Dryer, Charles R. 1889 A

Report upon the geology of Allen County [Indiana].

Geol. Surv. Ind., XVI, 105-130.

Dublin, Louis I. 1903 A

Adaptations to aquatic, arboreal, fossorial and cursorial habits in mammals. II: Arboreal adaptations.

Amer. Naturalist, XXXVII, 731-736.

Abstract in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 136-137.

Dubois, Eugen 1922 A

Hat sich das Gehirn beim Haushunde, im Vergleich mit Wildhundarten, vergrössert oder verkleinert?

Bijdr. Dierk. Amsterdam, XXII, 315-320, 4 figs.

The literature is cited in foot-notes.

Dubois, Georges 1919 A

Le lemming à collier à Maubeuge.

Ann. Soc. geol. Nord., XLIV, 69-77, pl. i, 2 text-figs.

—— 1920 A

Arvicolidés et Léporidés du Quaternaire de Cambrai.

Ann. Soc. geol. Nord., XLIV, 90-98.

Dubreuil, G. 1913 A

La croissance des os des mammifères.

C. R. Soc. Biol., LXXIV, 756-758, 888-890, 934-937, 7 figs.

Du Bus, B. 1867 A

Sur quelques mammifères du crag d'Anvers.

Bull. Acad. Sci., Belgique (2), XXIV, 562-577.

—— 1868 A

Sur différents ziphiides nouveaux du crag d'Anvers.

Bull. Acad. Sci., Belgique (2), XXV, 621-630.

—— 1872 A

Mammifères nouveaux du crag d'Anvers.

Bull. Acad. Sci. Belgique (2), XXXIV, 491-509.

Ducatel, J. T. 1837 A

Report of the Geologist (to the Governor of Maryland), 1836 [1837], pages 1-60.

Mentions finding of vertebræ of *Delphinus* in Calvert County, at Owen's Landing (p. 10); at Frazier's Cliffs (p. 11); in Anne Arundel County (p. 25); and in Prince Georges County (p. 34).

Duckworth, W. L. H. 1904 A

Morphology and anthropology. A handbook for students.

Cambridge, Eng., 8vo., i-xxviii+1-564 pages, 333 illustrations.

Dudley, Joseph 1847 A

Letter from Gov. Dudley to the Rev. Cotton Mather, D.D.

Eager's History of Orange County, N. Y., 1847, 77-78.

The letter has the date, July 10, 1706.

Duerden, J. E. 1924 A

Methods of evolution.

Sci. Progress, 1924, No. 72, 556-564.

Duerst, J. Ulrich 1902 A

Sur le développement des cornes chez les cavicornes.

Bull. Mus. hist. nat. Paris, VIII, 197-203, 5 text-figs.

—— 1902 B

Versuch einer Entwicklungsgeschichte der Hörner der Cavicornia nach Untersuchungen am Hausrinde.

Festschrift Prof. Ad. Kraemer, 1-47, 14 text-figs.

—— 1903 A

Experimentelle Studien über die Morphogenie des Schädels der Cavicornia.

Vierteljahrschr. naturf. Ges. Zurich, XLVIII, 360-375, pls. v, vi.

—— 1903 B

Les lois mécaniques dans le développment du crâne des cavicornes.

C. R. Acad. Sci. Paris, CXXXVII, 342-344.

—— 1904 A

L'origine des chiens.

L'Anthrop., Paris, XV, 41-46.

Discusses the origin of domestic dogs.

—— 1908 A

Animal remains from the excavations at Anau [Turkestan] and the horse of Anau in its relations to the races of domestic horses.

Publ. Carnegie Instn. Wash., No. 73, II, pt. VI, 341-442, pls. 71-91, text-figs. 490-492.

Dugès, Alfred 1905 A
Rôle des nageoires chez les poissons.
Bull. Soc. géol. France, xxx, 107-110.
Reprinted in Arch. int. Physiol., iii, 127-129.

—— 1905 B
Note on the functions of the fins of fishes.
Science (n.s.), xxii, 798-800.

Dugmore, A. Radclyffe 1914 A
The romance of the beaver. Being the history of the beaver in the western hemisphere.
London. 8vo., i-xiv+1-225 pages, 48 illustrations.

Dujardin, F. 1836 A
Structure intérieure des dents.
L'Institut, Paris, iv, 318-319.

Dumble, E. T. 1894 A
The Cenozoic deposits of Texas.
Jour. Geol., ii, 549-567.

—— 1903 A
Geology of southwestern Texas.
Trans. Amer. Inst. Mg. Engrs., xxxiii, 913-987, 2 text-figs.
Abstract in Geol. Centralbl., ix, 467.

—— 1915 A
Problem of the Texas Tertiary sands.
Bull. Geol. Soc. Amer., xxvi, 447-476, pls. xxv-xxvii, 1 text-fig.

—— 1920 A
The geology of east Texas.
Bull. Univ. Texas, No. 1869, i-vii+1-388 pages, 12 pls. Published Feb. 1920.

Duméril, A. M. Constant 1806 A
Zoologie analytique ou méthode naturelle de classification des animaux, rendu plus facile à l'aide de tableaux synoptiques.
Paris. 8vo., i-xxxiii+1-344 pages.
The vertebrates occupy pages 4-153.

—— 1856 A
Ichthyologie analytique ou classification des poissons, suivant la méthode naturelle, a l'aide de tableaux synoptiques.
Mém. Acad. Sci. France, xxvii, 1-511 pages.

Duméril, Auguste Henri André 1870 A
Histoire naturelle des poissons ou ichthyologie générale. Tome II: Ganoïdes, Dipnés, Lophobranches.
1-624 pages, with plates.
This work forms part of Roret's "Collection des suites à Buffon."

Dumortier, B. C. 1839 A
Mémoire sue le delphinorhynque microptère échoué à Ostende.
Nouv. Mém. Acad. Sci. Bruxelles, xii, art. 10, 1-12, 3 pls.

Duncan, P. Martin 1878 A
Remarks on affinities of mosasaurians.
Quart. Jour. Geol. Soc., xxxiv, 752.

Duncker, Georg 1923 A
Warnung.
Zool. Anz., lvi, 238-239.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, i, 123. See Jordan, D. S., 1927 A.

Dunn, E. R. 1922 A
The sound-transmitting apparatus of salamanders and the phylogeny of the Caudata.
Amer. Naturalist, lvi, 418-427.

—— 1923 A
The geographical distribution of amphibians.
Amer. Naturalist, lvii, 129-136.

—— 1924 A
Siren, a herbivorous salamander.
Science (n.s.), lix, 145.

Durand, J. P. 1898 A
Ostéologie comparative et morphogénique des membres.
Anat. Anz., xiv, 292-297.

Du Toit, P. J. 1911 A
Über Broom's Ableitung der Säugetiere von den theromorphen Reptilien.
Naturw. Wochenschr., xxvi (N.F., x), 417-423, 6 text-figs.

—— 1913 A
Untersuchungen über das Synsacrum und den Schwanz von *Gallus domesticus* nebst Beobachtungen über Schwanzlosigkeit bei Kaulhühnern. Ein Beitrag zur Frage nach der Homologie der Wirbel und Wirbelregionen.
Jena. Zeitschr. Naturwiss., xlix, 149-312, pls. xii-xiv, 21 text-figs.
Pages 304-309 give a list of works on the subject.

—— 1914 A
Untersuchungen über das Synsacrum und den Schwanz von *Gallus domesticus* nebst Beobachtungen über Schwanzlosigkeit bei Kaulhühnern.
Vierteljahrsschr. naturf. Ges. Zurich, lviii, 310-328.

Duvernoy, G. L. 1822 A
Recherches anatomiques sur les organes du mouvement du Phoque commun, *Phoca vitulina* Lin.
Mém. Mus. hist. nat. Paris, IX, 49-70; 165-189.

Dwight, Thomas 1909 A
A criticism of Pfitzner's theory of the carpus and tarsus.
Anat. Anz., XXXV, 366-370.

Dybowski, Benedikt 1883 A
Notice sur la différence sexuelle entre les crânes de la *Rhytina stelleri*.
Proc. Zool. Soc. Lond., 1883, 72, 73.

Eager, Samuel W. 1847 A
An outline history of Orange County [N. Y.].
Newburgh, 1846-7, 8vo., pages 1-653.
On pages 71-80 is an account of the mastodons found in the county.

Eales, Nellie B. 1926 A
The anatomy of the head of a fœtal African elephant, *Elephas africanus*.
Trans. Roy. Soc. Edinb., LIV, 491-551, 12 pls.
There is given a bibliography of 93 titles.

—— 1926 B
Einige Anmerkungen über die Monographie von Boas und Paulli, "The elephant's head." Pt. 2. Jena, 1925.
Anat. Anz., LXI, 361-364.

Earle, C. 1897 A
On the affinities of *Tarsius;* a contribution to the phylology of Primates.
Amer. Naturalist, XXXI, 569-575; 680-689.
Reviewed in Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 464-467.

—— 1897 B
The lemurs as ancestors of the apes.
Nat. Sci., X, 308-313.

—— 1898 B
Notes on the fossil Mammalia of Europe.
Amer. Naturalist, XXXII, 115-117.
Abstract in Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 468-469.

Eastman, Charles Rochester 1897 B
On *Ctenacanthus* spines from the Keokuk limestone of Iowa.
Amer. Jour. Sci. (4), IV, 10-13, 2 text-figs.
Describes *C. xiphias* St. J. and W. and *C. acutus* sp. nov.

—— 1898 E
Agassiz's work on fossil fishes.
Amer. Naturalist, XXXII, 177-185.

Eastman, C. R.—Continued 1898 F
On remains of *Struthiolithus chersonensis* from northern China.
Bull. Mus. Comp. Zool., XXXII, 127-144, with pl.

—— 1899 F
Abstract in Geol. Centralbl., II, 90.

—— 1900 B
Abstract in Geol. Centralbl., I, 605.

—— 1900 E
Abstract in Geol. Centralbl., II, 89.

—— 1900 F
Karpinsky's genus *Helicoprion*. A review.
Amer. Naturalist, XXXIV, 579-582, 1 text-fig.

—— 1900 G
Review of Bashford Dean's paper: The Devonian "Lamprey," *Palæospondylus gunni* Traquair.
Jour. Geol., VIII, 286-289.

—— 1901 A
On *Campodus, Edestus, Helicoprion, Acanthodes,* and other Permo-Carboniferous sharks.
Science (1), XIV, 795.
Abstract in Geol. Centralbl., III, 120.

—— 1901 B
Pisces [of Eocene of Maryland].
Maryland Geol. Surv. Eocene, 98-115, pls. xii-xv.
Abstracts in Geol. Centralbl., II, 765; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 303-304; Rev. crit. Paléozool., XIII, 15.

—— 1901 C
Traquair's presidential address, Bradford, 1900.
Amer. Naturalist, XXXV, 327-329.

—— 1902 A
On the genus *Peripristis* St. John.
Geol. Mag., IX, 388-391, 2 text-figs.
Abstracts in Geol. Centralbl., III, 313; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 137; Rev. crit. Paléozool., VII, 134; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 89.

—— 1902 B
Some carboniferous cestraciont and acanthodian sharks.
Bull. Mus. Comp. Zool., XXXIX, 55-99, pls. i-vii, 14 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 133; Rev. crit. Paléozool., VI, 180-182.

—— 1902 C
Position of Trematospidæ.
Amer. Naturalist, XXXVI, 505-507.

Eastman, C. R.—Continued 1902 D

Some hitherto unpublished observations of Orestes St. John on Paleozoic fishes.

Amer. Naturalist, XXXVI, 653-659, 4 text-figs.

Abstracts in Geol. Centralbl., IV, 301; Rev. crit. Paléozool., VII, 135.

—— 1902 E

Notice of interesting new forms of Carboniferous fish remains.

Amer. Naturalist, XXXVI, 849-854, 2 text-figs.

Abstracts in Geol. Centralbl., IV, 292; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 138; Rev. crit. Paléozool., VII, 135; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 151.

—— 1902 F

Phylogeny of the cestraciont group of sharks.

Science (n.s.), XVI, 267.

—— 1902 G

The carboniferous fish-fauna of Mazon Creek, Illinois.

Jour. Geol., X, 535-541, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 140; Geol. Centralbl., IV, 291; Rev. crit. Paléozool., VII, 83.

—— 1902 H

On *Campyloprion*, a new form of *Edestus*-like dentition.

Geol. Mag. (4), IX, 148-152, pl. viii, text-fig. 3.

Abstracts in Geol. Centralbl., III, 120; Rev. crit. Paléozool., VII, 136; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 89.

—— 1902 I

Devonian fish fauna of Iowa.

Bull. Geol. Soc. Amer., XIII, 537. Abstract.

—— 1903 A

Sharks' teeth and cetacean bones from the red clay of the tropical Pacific.

Mem. Mus. Comp. Zool., XXVI, 179-189, pls. i-iii, 5 text-figs.; Rev. crit. Paléozool., VII, 195.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 150.

—— 1903 B

Carboniferous fishes from the central western States.

Bull. Mus. Comp. Zool., XXXIX, 163-226, pls. i-v, 17 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 140-142; Geol. Centralbl., V, 485-486; Rev. crit. Paléozool., VII, 195; X, 208.

Eastman, C. R.—Continued 1903 C

A peculiar modification amongst Permian dipnoans.

Amer. Naturalist, XXXVII, 493-495, 2 text-figs.

Abstracts in Geol. Centralbl., V, 463; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 477; Rev. crit. Paléozool., VIII, 90.

—— 1903 D

On the nature of *Edestus* and related forms.

Mark Anniversary Volume, 279-289, pl. xxi.

Abstracts in Geol. Centralbl., VII, 621; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 151.

—— 1903 E

[On alleged appendages of *Trematapsis*].

Amer. Naturalist, XXXVII, 573-577, 2 text-figs.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 161; Rev. crit. Paléozool., VIII, 91-92.

—— 1904 A

Earliest notice of American Proboscidea.

Science (n.s.), XX, 890.

—— 1904 B

Upper Devonian fish remains from Colorado.

Amer. Jour. Sci. (4), XVIII, 253-260, 6 text-figs.

Abstract in Geol. Centralbl., VI, 719; Rev. crit. Paléozool., IX, 10.

—— 1904 C

Asterolepid appendages.

Amer. Jour. Sci. (4), XVIII, 141-144.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 160; Rev. crit. Paléozool., IX, 10.

—— 1904 D

Fossil plumage.

Amer. Naturalist, XXXVIII, 669-672, 1 text-fig.

Abstract in Geol. Centralbl., VII, 618-619.

—— 1904 E

On the dentition of *Rhynchodus* and other fossil fishes.

Amer. Naturalist, XXXVIII, 295-299, 2 text-figs.

Abstracts in Geol. Centralbl., VII, 620-621; Rev. crit. Paléozool., X, 30-31.

—— 1904 F

Marginal and ridge scales in *Cephalaspis* and *Drepanaspis*.

Science (n.s.), XIX, 703-704.

Eastman, C. R.—Continued 1904 G

A recent paleontological induction.

Science (n.s.), xx, 465-466.

—— 1904 H

Pisces [of Miocene of Maryland].

Maryland Geol. Surv. Miocene, 71-93, pls. xxviii-xxxii.

Abstracts in Geol. Centralbl., vii, 621; x, 373.

—— 1904 I

The earliest mention of fossil fishes.

Science (n.s.), xx, 648-649.

—— 1905 A

A brief general account of fossil fishes.

Rep. Geol. Surv. New Jersey, 1904 (1905), 27-66, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, ii, Ref., 442; Geol. Centralbl., xi, 333-334; Rev. crit. Paléozool., x, 32; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 156.

—— 1905 B

The Triassic fishes of New Jersey.

Rep. Geol. Surv. New Jersey, 1904 (1905), 67-130, pls. i-xiv, text-figs. 9-13.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, ii, Ref., 442; Geol. Centralbl., xi, 334; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 156.

—— 1905 C

The literature of *Edestus*.

Amer. Naturalist, xxxix, 405-409.

Abstract in Geol. Centralbl., viii, 379.

There is a bibliography of 43 titles.

—— 1906 A

Dipnoan affinities of arthrodires.

Amer. Jour. Sci. (4), xxi, 131-143, 4 text-figs.

Abstracts in Geol, Centralbl., viii, 380; Nature, lxxiii, 1906, 422; Rev. crit. Paléozool., x, 207; Sci. Progress, i, 463.

—— 1906 B

Dipnoan affinities of arthrodires.

Science (n.s.), xxiii, 290.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 159.

—— 1906 C

Sermons in stomach stones.

Science (n.s.), xxiii, 983.

—— 1906 D

Structure and relations of *Mylostoma*.

Bull. Mus. Comp. Zool., l, 1-29, pls. i-v, 8 text-figs.

Abstracts in Geol. Centralbl., xi, 475; Rev. crit. Paléozool., xi, 17-19; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 157.

Eastman, C. R.—Continued 1906 E

Sharks' teeth and cetacean bones.

Bull. Mus. Comp. Zool., l, 74-98, pls. i-iii, 7 text-figs.

Abstract in Rev. crit. Paléozool., xi, 73, 88.

—— 1907 A

Mylostomid dentition.

Bull. Mus. Comp. Zool., l, 209-228, pl. xix, 4 text-figs.

Abstract in Rev. crit. Paléozool., xi, 229.

—— 1907 B

Devonic fishes of the New York formations.

Ann. Rep. N. Y. State Mus., 60, v; memoir 10, 1-235, pls. i-xv, 34 text-figs.

Abstracts in Amer. Jour. Sci., 1907 (4), xxiv, 443-445; Neues Jahrb. Min. Geol. Pal., 1908, ii, Ref., 443-446; Geol. Centralbl., xi, 475-477; Sci. Progress, ii, 521-522; Rev. crit. Paléozool., xii, 14-17.

—— 1907 C

Types of fossil cetaceans in the Museum of Comparative Zoology.

Bull. Mus. Comp. Zool., li, 77-94, pls. i-iv, 2 text-figs.

Abstracts in Geol. Centralbl., xii, 220; Rev. crit. Paléozool., xii, 3.

—— 1908 A

Devonian fishes of Iowa.

Iowa Geol. Surv., xviii, 29-386, pls. i-xvi, 41 text-figs.

Abstracts in Geol. Centralbl., xv, 507-509; Amer. Jour. Sci. (4), xxvii, 415; Bull. Geol. Soc. Amer., xiii, 537; Zeitschr. Indukt. Abstamm.-Vererb.-Lehre, ii, 1909, 351-353; Rev. crit. Paléozool., xiii, 159-161; Ann. Mag. Nat. Hist. (8), iv, 71; Sci. Progress, iv, 674; Geol. Mag. (5), vi, 228.

—— 1908 B

Notice of a new cœlacanth fish from the Iowa Kinderhook.

Jour. Geol., xvi, 357-362, 1 text-fig.

Abstract in Geol. Centralbl., xiii, 204; Rev. crit. Paléozool., xiii, 85.

—— 1908 C

Discovery of a new species of *Cœlacanthus*.

Science (n.s.), xxvii, 355.

—— 1909 A

A new species of *Helodus*.

Ann. Carnegie Mus., v, 488-489.

Abstracts in Geol. Centralbl., xiv, 488; Rev. crit. Paléozool., xvii, 140.

—— 1909 B

Mylostomid dental plates.

Science (n.s.), xxix, 997-998.

—— 1909 C

Mylostomid palatal dental plates.

Bull. Mus. Comp. Zool., lii, 261-269, 3 text-figs.

Eastman, C. R.—Continued 1911 A

Triassic fishes of Connecticut.

Bull. Geol. Nat. Hist. Surv. Conn., XVIII, 1-77, pls. i-xi, 8 text-figs.

Abstracts in Geol. Centralbl., XIX, 569, 703; Rev. crit. Paléozool., XVII, 141.

Review in Jour. Geol., XXI, 377.

—— 1911 B

Jurassic saurian remains ingested within fish.

Ann. Carnegie Mus., VIII, 182-187, pls. x, xi.

Abstract in Geol. Centralbl., XIX, 444.

—— 1911 C

Catalog of fossil fishes in the Carnegie Museum. Part I: Fishes from the Upper Eocene of Monte Bolca.

Mem. Carnegie Mus., IV, 349-391, pls. xc-ci, 5 text-figs.

—— 1912 A

Symposium on ten years progress in vertebrate paleontology. Mesozoic and Cenozoic fishes.

Bull. Geol. Soc. Amer., XXIII, 228-232.

Abstract in Sci. Progress, VIII, 21.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Osborn, Williston and Sinclair.

—— 1912 B

Tertiary fish-remains from Spanish Guinea in West Africa.

Ann. Carnegie Mus., VIII, 370-378, pls. xxiii-xxiv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 478-479; Sci. Progress, VIII, 231.

—— 1912 C

Palæontology.

Amer. Year Book (1911), 656-660.

—— 1913 A

Brain structures of fossil fishes from the Caney shales.

Bull. Geol. Soc. Amer., XXIV, 119-120. Abstract.

—— 1913 B

Palæontology.

Amer. Year Book (1912), 676-678.

—— 1914 A

Notes on Triassic fishes belonging to the families Catopteridæ and Semionotidæ.

Ann. Carnegie Mus., IX, 139-148, pls. xxx-xxxii.

Abstract in Rev. crit. Paléozool., XX, 142.

—— 1914 B

Palæontology.

Amer. Year Book (1913), 687-690.

Eastman, C. R.—Continued 1915 A

Dipterus remains from the Upper Devonian of Colorado.

Ann. Carnegie Mus., IX, 279-283, 4 text-figs.

Abstracts in Rev. crit. Paléozool., 141; Geol. Zentralbl., XXIX, 188.

—— 1915 B

Report of investigation on Palæozoic fishes.

Ann. N. Y. Acad. Sci., XXVI, 439-440.

—— 1915 C

Palæontology.

Amer. Year Boon (1914), 657-659.

—— 1916 A

Palæontology.

Amer. Year Book, 1915, 654-656.

—— 1916 B

Recent progress in vertebrate palæontology. Fishes.

Science (n.s.), XLIII, 103-105.

—— 1917 A

Fossil fishes in the collection of the United States National Museum.

Proc. U. S. Nat. Mus., LII, 235-304, pls. i-xxiii, 9 text-figs.

Note on, in Nature, CXIX, 330.

Abstracts in Rev. crit. Paléozool., XXII, 4; Geol. Mag. (6), IV, 223-224; Ann. N. Y. Acad. Sci., XXVI, 439-440; Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 131.

—— 1917 B

Palæontology.

The Amer. Year Book (1916), 654-657.

—— 1917 C

Campodus and *Edestus.*

Bull. Geol. Soc. Amer., XXVIII, 214 (abstract).

——, and E. H. **Barbour** 1902 A

Synopsis of the Missourian and Permo-Carboniferous fish fauna of Kansas and Nebraska.

Science (n.s.), XVI, 266-267.

A brief abstract.

——, **Gregory,** and **Matthew** 1917 A

Recent progress in paleontology.

Science (n.s.), XLV, 117-121.

Eaton, G. F. 1903 A

Notes on the collection of Triassic fishes at Yale.

Amer. Jour. Sci. (4), XV, 259-268, pls. v, vi.

Abstracts in Geol. Centralbl., V, 43; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 152.

Eaton, G. F.—Continued 1903 B

The characters of *Pteranodon*.

Amer. Jour. Sci. (4), XVI, 82-86, pls. vi, vii.

Abstracts in Geol. Centralbl., V, 42; Neues Jahrb. Min. Geol. Pal., 1905, I, 517.

—— 1904 A

Characters of *Pteranodon* (second paper).

Amer. Jour. Sci. (4), XVII, 318-320, pls. xix, xx.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 172; Geol. Centralbl., VII, 427.

—— 1905 A

Occurrences of *Mastodon humboldtii* in northern Mexico.

Amer. Jour. Sci. (4), XIX, 330.

—— 1908 A

The skull of *Pteranodon*.

Science (n.s.), XXVII, 254-255.

—— 1910 A

Osteology of *Pteranodon*.

Mem. Conn. Acad. Sci., II, 1-38, pls. i-xxxi.

Abstracts in Amer. Jour. Sci. (4), XXXI, 148-150; Geol. Centralbl., XVII, 335; Sci. Progress, V, 677; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 143-145; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 210; Nature, LXXXIX, 123, fig.

—— 1914 A

Vertebrate fossils from Ayusbamba, Peru.

Amer. Jour. Sci. (4), XXXVII, 141-154, pls. v-vii, 7 text-figs.

—— 1922 A

John Day Felidæ in the Marsh collection.

Amer. Jour. Sci. (5), IV, 425-452, 12 figs.

Review in Rev. crit. Paléozool., XXVIII, 164, 1924.

Abstract in Geol. Zentralbl., XXIX, 222.

—— 1923 A

Vertebrate fossils from Mina Erupcion.

Amer. Jour. Sci. (5), VI, 229-238, 9 figs.

Abstract in Geol. Zentralbl., XXX, 538.

Eberlein, R. 1910 A

Ueber polydaktylie beim Pferde.

Arch. wiss. u. prakt. Tierheilk., XXXVI, Suppl. Bd., 72-92, pls. i-v.

The bibliography presents 62 titles.

Ebner, V. 1889 A

Urwirbel und Neugliederung der Wirbelsäule.

Sitz.-Ber. Akad. Wiss., Wien, XCVII, 194-206, pls. i, ii.

—— 1896 A

Über die Wirbel der Knochenfische und die Chorda dorsalis der Fische und Amphibien.

Sitz.-Ber. Akad. Wiss. Wien, CV, Abth, iii, 123-161, pls. i-iv, 1 text-fig.

Appended is a bibliography of 35 titles.

—— 1906 A

Über die histologischen Veränderungen des Zahnschmelzes während der Erhärtung, insbesondere beim Menschen.

Arch. mikr. Anat., LXVII, 18-81, pls. ii-v.

There is a bibliography consisting of 32 titles.

—— 1909 A

Ueber scheinbare und wirkliche Radiärfasern des Zahnbeines.

Anat. Anz., XXXIV, 289-309, 9 text-figs.

For a rejoinder to this paper see Korff, K., 1909 A.

Edgeworth, F. H. 1907 A

The development of the head-muscles in *Gallus domesticus*, and the morphology of the head-muscles in the Sauropsida.

Quart. Jour. Micr. Sci. (n.s.), LI, 511-556, 39 figs.

The bibliography records 27 titles.

—— 1920 A

On the development of the hypobranchial and laryngeal muscles in Amphibia.

Jour. Anat. Lond., LIV, 125-162, 15 pls.

In the bibliography are recorded 38 titles.

—— 1923 A

Note on the development of the quadrate and epihyal of *Ceratodus*.

Quart. Jour. Micr. Sci. (n.s.), LXVII, 359-368, figs. 31-39.

Four titles form the bibliography.

—— 1923 B

On the larval hyobranchial skeleton and musculature of *Cryptobranchus*, *Menopoma*, and *Ellipsoglossa*.

Jour. Anat. Lond., LVII, 97-105, 13 figs.

In the bibliography are 11 titles.

Edgeworth, F. H.—Continued 1923 C

On the quadrate in *Cryptobranchus*, *Menopoma*, and *Hynobius*.

Jour. Anat. Lond., LVII, 238-244, 11 figs.

—— 1923 D

On the development of the hypobranchial, branchial, and laryngeal muscles of *Ceratodus*. With a note on the development of the quadrate and epihyal.

Quart. Jour. Micr. Sci. (n.s.), LXVII, 325-368, 39 text-figs.

There are listed 23 titles in the bibliography.

—— 1925 A

On the autostylism of Dipnoi and Amphibia.

Jour. Anat. Lond., LIX, 225-264, pls. i-xxvi.

There is appended a bibliography of 63 titles.

—— 1926 A

On the hyomandibula of Selachii, Teleostomi and *Ceratodus*.

Jour. Anat. Lond., LX, 173-193, 23 figs.

18 titles are cited in the bibliography.

Edwards, Alphonse Milne 1840 A

Remarque sur les affinités naturelles du *Lepidosiren*.

Ann. Sci. nat. (2), XIV, 159-162.

—— 1866 A

Rapport sur diverses communications relatives à la paléontologie et la faune actuelle du Mexique.

Extract des Arch. Comm. Sci. Mex., II, livr. iii, 1-9, pls. i-ii.

This paper forms pages 212-220 of the complete report.

—— 1884 A

Sur la classification des taupes de l'ancien continent.

C. R. Acad. Sci. Paris, XCIX, 1141-1143.

Edwards, J. J. 1902 A

Paleontology of Bartholomew County, Indiana. Mammalian fossils.

Proc. Indiana Acad. Sci., 1901, 247-248.

A brief abstract in Geol. Centralbl., IV, 342.

The identifications of species in this paper are of doubtful correctness.

Edwards, Linden F. 1926 A

The protractile apparatus of the mouth of the catastomid fishes.

Anat. Record, XXXIII, 257-270, 6 figs.

The bibliography presents 15 titles.

Egerton, P. G. 1843 A

On some new species of fossil chimæroid fishes, with remarks on their general affinities.

Proc. Geol. Soc. Lond., IV, 153-157, 211.

—— 1845 A

See Hay, O. P., 1902 A, 85.

Reprinted in Proc. Geol. Soc. Lond., IV, 414-416, pl. iv.

—— 1852 C

Figures and descriptions illustrative of British organic remains.

Mem. Geol. Surv. U. K., decade VI, pls. i-x.

The articles are separately paged and are designated as 6B, 6C, etc., to 6L. They are all devoted to descriptions of fossil fishes.

—— 1853 C

Palichthyologic notes. No. 5. On two new species of placoid fishes from the Coal Measures.

Quart. Jour. Geol. Soc., IX, 280-282, pl. xii.

—— 1854 A

Palichthyologic notes. No. 6. On a fossil fish from the upper beds of the New Red sandstone at Bromsgrove.

Quart. Jour. Geol. Soc., X, 367-371, pl. xi.

—— 1855 A

Figures and descriptions illustrative of British organic remains.

Mem. Geol. Surv. U. K., decade VIII, pls. i-x.

—— 1858 A

Figures and descriptions illustrative of British organic remains.

Mem. Geol. Surv. U. K., decade IX, pls. i-x.

—— 1858 B

On *Chondrosteus*, an extinct genus of fish allied to the Sturionidæ.

Proc. Roy. Soc. Lond., IX, 233.

—— 1873 A

On *Platysiagum sclerocephalum* Egerton and *Palæospinax priscus* Egerton.

Quart. Jour. Geol. Soc., XXIX, 419-421.

—— 1877 A

On some new pycnodonts.

Geol. Mag. (2), IV, 49-55, pls. iii, iv.

Eggeling, H. 1904 A

Zur Morphologie des Manubrium sterni.

Denk. med.-naturw. Ges. Jena, XI (Festschr. 70sten. Geburtst. Ernst Haeckel), 59-114, pl. vi, 43 text-figs.

Eggeling, H.—Continued 1906 A
Clavicula, Præclavium, Halsrippen und Manubrium sterni.
Anat. Anz., XXIX, 99-110, 3 text-figs.

—— 1922 A
Die Gablung der Halswirbeldornen und ihre Ursachen.
Anat. Anz., LV, 33-94, 21 figs.
For bibliography see pages 209-211.

—— 1922 B
Die Halswirbeldornen und deren Muskeln bei Halbaffen.
Anat. Anz., LV, 201-211, 4 figs.
Bibliography on pages 209-211.

Eggert, Bruno 1927 A
Über sexuelle Unterschiede am Schädel der Erdkröte (*Bufo vulgaris* Laur.) und ihr Verhalten bei der experimentell-physiologischen Geschlechtsumstimmung.
Zeitschr. wiss. Zool., CXXIX, 567-588, pl. iv, 13 text-figs.
The bibliography includes 10 titles.

Ehrenberg, K. 1925 A
Die ontogenetische Entwicklung des Höhlenbärenskelettes.
Palaeont. Zeitschr., VII, 48-52.

—— 1926 A
Über Epiphysenbildungen am Hinterhaupte und an den beiden atypischen Halswirbeln des Höhlenbären und anderer Säugetiere.
Palaeont. Zeitschr., VIII, 54-60.

Eichwald, E. 1832 A
Neue Deutung des Kiemendeckels der Fische; nebst vergleichend anatomischen Beobachtungen über das Zungenbein der Wirbelthiere.
Isis von Oken, XXV, 858-897.

—— 1835 A
De pecorum et pachydermorum reliquiis fossilibus, in Lithuania, Volhynia et Podolia repertis Commentatio.
Nova Acta Acad. Leop. Carol., XVII, 675-760, pl. li-lxiv.

—— 1840 B
Geognostiche Uebersicht von Esthland und den Nachbar-Gegenden.
Neues Jahrb. Min. Geogn. Geol., 1840, 421-430.

Eigenmann, Carl H. 1887 A
A review of the American Gasterosteidæ.
Proc. Acad. Nat. Sci. Phila., 1886, 233-252.

—— 1890 B
The evolution of the catfishes.
Zoe, I, 10-15.

Eigenmann, Carl H.—Continued 1894 A
On the viviparous fishes of the Pacific coast of North America.
Bull. U. S. Fish Comm., XII, 1892 (1894), 381-478, pls. xciv-cxviii.

—— 1902 A
The eyes of *Rhineüra floridana.*
Proc. Wash. Acad. Sci., IV, 533-542, fig. 22.
The bibliography includes 9 titles.

—— 1909 A
Cave vertebrates of America.
Publ. Carnegie Instn. Wash. No. 104, vii-ix+1-241 pages, 29 pls., 72 text-figs.

Eimer, G. H. Theodor 1901 A
Vergleichend-anatomisch-Physiologische Untersuchungen über das Skelett der Wirbeltiere.
8vo., i-xi+1-263 pages, 66 text-figs.

Eisler, P. 1895 A
Die Homologie der Extremitaeten.
Abh. naturf. Ges. Halle, XIX, 1-258, pls. x-xii.
On pages 245-258 is a bibliography of 292 titles.

Eldridge, George H. 1896 A
Geology of the Denver Basin, Mesozoic Geology.
Mon. U. S. Geol. Surv., XXVII, 51-150.

Ellenberger, W., and H. **Baum** 1903 A
Handbuch der vergleichenden Anatomie der Haustiere.
Tenth edition. 8vo., i-xvi+1-1004 pages, 565 illustrations in text.
The osteology and odontography occupy pages 12-200.

Elliot, A. I. M. 1907 A
Some facts in the later development of the frog, *Rana temporaria.*
Part I: The segments of the occipital region of the skull.
Quar. Jour. Micr. Sci., Lond., LI, 647-657, pls. xxxix, xl.

Elliot, Daniel G. 1885 A
Natural history of birds. Gallini, Columbæ.
Stand. Nat. Hist., III, 197-259, figs. 94-123.

—— 1901 A
A synopsis of the mammals of North America and the adjacent seas.
Field Columb. Mus. Zoöl. (2), i-xvi+1-522 pages, pls. i-lvi, 94 text-figs.
Pages 473-522, with pls. l-lvi, form a supplement to the Synopsis, which is entitled: A list of the land and sea mammals of North America north of Mexico.

Elliot, Smith G. 1921 A
Living example of *Tarsius.*
Proc. Zool. Soc. Lond., 1921, pt. 1, 184-186, pl. i.

Ells, R. W. 1906 A
Report on the geology of Prince Edward Island.
Rep. Geol. Surv. Canada for 1902-3, xv, A, 369-379.

Elrod, Moses N., and A. C. **Benedict** 1892 A
Geology of Wabash County [Indiana].
Geol. Surv. Ind., xvii, 192-272.

Elwes, H. J. 1903 A
On the present condition and habits of the elk in Norway.
Proc. Zool. Soc. Lond., 1903, i, 133-151, text-figs. 18-26.

Emerson, Benjamin Kendall 1898 A
Geology of Old Hampshire County, Massachusetts, comprising Franklin, Hampshire, and Hampden Counties.
Mon. U. S. Geol. Surv., xxix, i-xix; 1-790, pls. i-xxxv, text-figs. 1-48.
Contains a list of Triassic fishes found in Massachusetts and some remarks on the localities (pages 398-400).

—— 1917 A
Geology of Massachusetts and Rhode Island.
Bull. U. S. Geol. Surv., dxcvii, 1-289, maps and figures.

——, and F. B. **Loomis** 1904 A
On *Stegomus longipes,* a new reptile from the Triassic sandstones of the Connecticut Valley.
Amer. Jour. Sci. (4), xvii, 377-380, pl. xxii.
Abstract in Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 169; Geol. Centralbl., vii, 427-428.

Emery, C. 1887 A
Über die Beziehungen des Cheiropterygiums zum Ichthyopterygium.
Zool. Anz., x, 185-189, 5 text-figs.

—— 1890 A
Zur Morphologie des Hand- und Fussskeletts.
Anat. Anz., v, 283-294, 5 text-figs.

—— 1895 A
Études sur la morphologie des membres des amphibiens et sur la phylogénie du chiroptérygium.
Arch. ital. Biol., xxii, 218-232.

Emery, C.—Continued 1897 D
Accessorische und echte Skeletstücke.
Anat. Anz., xiii, 600-602.

—— 1901 A
Hand- und Fussskelet von *Echidna hystrix.*
Semon's Zool. Forschungsr. in Austral., iii, 663-676, 16 text-figs.

Emmons, E. 1852 A
Report of Professor Emmons on his geological survey of North Carolina.
Raleigh Execut. document No. 13. 8vo., pages 1-183.

—— 1857 B
Permian and Triassic systems of North Carolina.
Edinb. New Philos. Jour. (n.s.), v, 370.

Emmons, S. F. 1896 A
Pleistocene geology [of the Denver Basin].
Mon. U. S. Geol. Surv., xxvii, 254-278.
The information about fossil vertebrates was furnished by Prof. George L. Cannon.

Emrich, Clarence T. 1909 A
Mastodon bones from Colorado.
Bull. Sch. Mines., Colorado, v, 36-37, 1 fig.
The bones may well have been those of an elephant.

Engel, Heinrich 1909 A
Die Zähne am Rostrum der Pristiden.
Zool. Jahrb. Anat., xxix, 51-100, pls. iii-vi, 2 text-figs.
At the close of this paper is a bibliography of 39 titles.

Engelmann, O. 1910 A
Beitrag zur Kenntnis der Entwickelungsgeschichte der Hinterhauptsschuppe.
Anat. Anz., xxxv, 485-533, pls. iv-vi, 32 text-figs.
Appended is a bibliography of 27 titles.

Erdl, M. 1843 A
Untersuchungen über den Bau der Zähne bei den Wirbelthieren, insbesondere den Nagern.
Abh. Bayer. Akad., iii, 485-548, pls. i, ii.
There are numerous citations of works on the subject.

Eschricht, Daniel Frederik 1849 A
Zoologisch-anatomisch-physiologische Untersuchungen über die nordischen Wallthiere.
Folio. Leipzig, 1849, i-xvi+1-206 pages, pls. i-xv, 84 wood-cuts.

Eschricht, D. F.—Continued 1851 A
Vergleichende Bemerkungen über die Rippen der Fische.
Froriep's Tagsber., II, 110-111.

—— 1869 A
Ni Tavler til Oplysning af Hvaldyrenes bygning Med tilhorende Forklaring.
Dansk Vid. Selsk. Skr., IX, 1, 1-14, pls. i-ix.

Esdaile, Philippa C. 1912 A
Intensive study of the scales of three specimens of *Salmo salar*.
Mem. Manchester Soc., LVI, No. 3, 1-22, 6 plates.

—— 1913 A
The scientific results of the salmon scale research at Manchester University.
Mem. Manchester Soc., LVII, No. 3, 1-32, graphs and tables.
A bibliography of 18 titles is furnished.

Espinosa, Luis 1902 A
Descripción oro-hidrográfica y geológica del Valle de México.
Memoria historica, técnica y administrativa, de las obras del Desagüe del Valle de México, 1449-1900. Vol. I, México, 1902.

Eternod, Auguste 1895 A
Essai de théorie de dérivation de la dentition humaine, etc.
Rev. internat. Odont., XV (ser. 2, II), 343-344.

Eternod, A. C. F. 1900 A
Démonstrations avec pièces à l'appui de notre théorie bicuspidienne de l'appareil dentaire humain.
C. R. Congr. internat. Med. Paris, 1900, Sect. Stomatologie, 174-176.

—— 1911 A
Toutes les dents humaines sont des bicuspidées modifiées.
Anat. Anz., Ergänzungsh., XXXVIII, 144-156, 18 text-figs.

Etheridge, Robert 1866 A
On the discovery of several new labyrinthodont reptiles in the Coal-Measures of Ireland.
Geol. Mag. (1), III, 4-5.

—— 1875 A
On some undescribed Carboniferous fossils.
Geol. Mag. (2), II, 241-245, pl. viii.

—— 1877 A
Further contributions to British Carboniferous palæontology.
Geol. Mag. (2), IV, 306-309, pl. xiii.

Etheridge, Robert—Continued 1878 A
Palæontological notes.
Geol. Mag. (2), V, 269-270.

—— 1898 A
On a precaudal vertebra of *Ichthyosaurus australis* McCoy.
Ann. Mag. Nat. Hist. (7), I, 143-146.

—— 1905 A
Description of the mutilated cranium of a large fish, from the Lower Cretaceous of Queensland.
Rec. Austral. Mus., VI, 5-8, pls. i, ii.

—— 1906 A
The cranial buckler of a dipnoan fish, probably *Ganorhynchus*, from the Devonian beds of the Murrumbidgee River, New South Wales.
Rec. Austral. Mus., VI, 129-132, pl. xxviii.

Eudes-Deslongchamps, E. 1836 A
Remarques sur les dents du morse.
L'Institut, Paris, IV, 134.

—— 1842 A
Remarques zoologiques et anatomiques sur l'*Hyperoodon*.
Mem. Soc. Linn. Normandie, VII, 1-18, pl. i.

—— 1842 B
Remarques anatomiques sur le tapir d'Amerique.
Mem. Soc. Linn. Normandie, VII, 19-35, pls. ii, iii.

—— 1842 C
Remarques anatomiques sur le sternum du *Didelphis virginiana*.
Mem. Soc. Linn. Normandie, VII, 37-40, pl. iv.

—— 1842 D
Observations pour servir à l'histoire anatomique et physiologique des trigles.
Mem. Soc. Linn. Normandie, VII, 45-52, pl. v.

Evans, A. H. 1899 A
Birds.
Cambridge Natural History, IX, i-xvi+ 1-655 pages, 144 text-figs.

Evans, Herbert Muir 1904 A
A new cestraciont spine from the lower Triassic of Idaho.
Bull. Dept. Geol. Univ. Calif., III, 397-401, pl. xlvii.
Abstract in Geol. Centralbl., VII, 620.

—— 1916 A
The poison-organ of the sting-ray *Trygon pastinica*.
Proc. Zool. Soc. Lond., 1916, 431-440, 7 figs.

Evans, H. M.—Continued 1923 A

The defensive spines of fishes, living and fossil, with observations on the nature of fish venoms.

Phil. Trans. Roy. Soc. Lond., CCXII, 1-33, pls. i-iii, 14 text-figs.

The bibliography presents 18 titles.

Evermann, B. W. See **Jordan** and **Evermann**.

Ewart, J. Cossar 1904 A

The multiple origin of horses and ponies.

Nature, LXIX, 590-596, 6 text-figs.

Reprinted in Ann. Rep. Smithson. Instn. 1904 (1905), 437-455.

—— 1904 B

The making of the elephant.

Proc. Roy. Phys. Soc. Edinb., XV, 143-152.

—— 1907 A

On skulls of horses from the Roman fort at Newstead, near Melrose, with observations on the origin of domestic horses.

Trans. Roy Soc. Edinb., XLV, 555-587, pls. i-iii, 6 text-figs.

—— 1909 A

The possible ancestors of the horses living under domestication.

Science (n.s.), XXX, 219-223.

Eyton, T. C. 1867 A

Osteologia avium; or, A sketch of the osteology of birds.

i-x+1-229+i-vii pages, 116 plates. 4to.

See a brief note and criticism in Ibis, IV, 1868, 98.

—— 1869 A

Osteologia avium; or, A sketch of the osteology of birds.

Suppl. I, 1-3, 18 plates.

—— 1873 A

Osteologia avium; or, A sketch of the osteology of birds.

Suppl. II, pt. 1, 4-18, 21 plates.

—— 1874 A

Osteologia avium; or, A sketch of the osteology of birds.

Suppl. II, pt. 2, 16-33, 20 plates.

—— 1875 A

Osteologia avium; or, A sketch of the osteology of birds.

Suppl. II, pt. 3, 30-46, 10 plates.

Facciola, L. 1901 A

Esame degli studii su lo sviluppo dei murenoidi e l'organizzazione dei leptocefali.

Atti Soc. Nat. Modena (4), II, 41-85, pls. vi, vii.

Fahrenholz, Curt 1915 A

Über die Verbreitung von Zahnbildungen und Sinnesorganen im Vorderdarm der Selachier und ihre phylogenetische Beurteilung.

Jena. Zeitschr. Naturwiss., LIII, 389-444, pls. vi, vii, 7 text-figs.

Appended is a bibliography of 35 titles.

Fairbanks, Harold W. 1897 A

Oscillations of the coast of California during the Pliocene and Pleistocene.

Amer. Geologist, XX, 213-245.

Fairchild, H. L. 1887 A

Elephants, ancient and modern, with reference also to the extinction of the mammoth.

Trans. N. Y. Acad. Sci., IV, 19-24.

—— 1894 A

The evolution of the ungulate mammals.

Proc. Rochester Acad. Sci., II, 206-209.

—— 1916 A

Pleistocene uplift of New York and adjacent territory.

Bull. Geol. Soc. Amer., XXVII, 235-262, pls. x-xii.

The bibliography presents a list of 128 papers.

Falconer, Hugh 1844 A

Remarks on *Chalicotherium*.

Proc. Geol. Soc. Lond., IV, 239-240.

—— 1845 A

Description of some fossil remains of *Dinotherium*, giraffe, and other Mammalia, from the Gulf of Cambay.

Quart. Jour. Geol. Soc., I, 356-372, pl. xiv.

—— 1857 B

On the species of mastodon and elephant occurring in the fossil state in Great Britain. Part I: Mastodon.

Quart. Jour. Geol. Soc., XIII, 307-360, pls. xi, xii.

To correct error as regards the volume cited in Hay, O. P., 1902 A, 88.

—— 1857 C

On the species of mastodon and elephant occurring in the fossil state in England. Pt. II: Elephas.

Quart. Jour. Geol. Soc., XIV, 81-84.

Abstract only.

For epitome of this paper see Jahrb. Min. Geol. Pal., 1858, 379.

Falconer, H.—Continued 1863 A

On the American fossil elephant of the regions bordering the Gulf of Mexico (*E. columbi* Falc.); with general observations on the living and extinct species.

Nat. Hist. Rev., III, 43-114, pls. i, ii.

——, and P. T. **Cautley** 1836 A

Note on the fossil camel of the Sivalik Hills.

Asiatic Researches, XIX, pt. 1, 115-134, pls. xx, xxi.

—— 1836 B

Note on the *Ursus sivalensis*, a new fossil species from the Sivalik Hills.

Asiatic Researches, XIX, pt. 1, 193-200.

—— 1846 A

Fauna antiqua sivalensis, being the fossil zoology of the Sewalik Hills, in the north of India.

Proboscidea. 8vo., London, pages 1-64.

The text accompanying Falconer and Cautley, 1847 A.

—— 1847 A

Fauna antiqua sivalensis, being the fossil zoology of the Sewalik Hills, in the north of India. Edited by Hugh Falconer.

Folio, London, pls. i-xcii.

The explanations of the plates are to be found in Falconer and Murchison, 1867 A.

—— 1868 A

On additional fossil species of the order Quadrumana from the Sewalik Hills.

Palæont. Memoirs of Hugh Falconer, I, 300-306, pl. xxiv.

—— See also **Cautley**, P. T., and H. **Falconer**

——, and C. **Murchison** 1867 A

Descriptions of the plates on the *Fauna antiqua sivalensis*, from notes and memoranda by Hugh Falconer, M. D.

Compiled and edited by Charles Murchison, M. D., F. R. S., 8vo., London, pages 1-136.

Here are supplied the explanations of the plates of Falconer, H., and P. T. Cautley, 1847 A.

Fawcett, E. 1910 A

The development of the human mandible.

C. R. Congr. internat. Med., Budapest, 1909, sec. 1, 170-179.

Fawcett, E.—Continued 1911 A

The development of the human maxilla, vomer and paraseptal cartilages.

Jour. Anat. Physiol. Lond., XLV, 378-405, 26 figs.

These are references to 16 works consulted.

—— 1917 A

The primordial cranium of *Microtus amphibius* (water-rat), as determined by sections and a model of the 25-mm. stage. With comparative remarks.

Jour. Anat. Physiol. Lond., LI, 309-359, pls. i-x, text-figs. 2.

—— 1918 A

The primordial cranium of *Erinaceus europæus*.

Jour. Anat. Physiol. Lond., LII, 211-250, pls. i-xxii, 15 figs.

—— 1918 B

The primordial cranium of *Pœcilophoca weddelli* (Weddell's seal) at the 27-mm. C. R. length.

Jour. Anat. Physiol. Lond., LII, 412-441, pls. i-xi.

—— 1921 A

The primordial cranium of *Tatusia novemcincta* as determined by sections and models of the embryos of 12 millimeter and 17 millimeter C. R. length.

Jour. Anat. Lond., LV, 187-217, pls. vi-ix.

—— 1923 A

The primordial cranium of *Xerus* (spiny squirrel) at the 17 and 19 millimeter stages.

Jour. Anat. Lond., LVII, 221-237, pls. i-iv, 2 text-figs.

Featherstonhaugh, G. W. 1831 B

To readers and correspondents.

Monthly Amer. Jour. Geol., I, 140-144.

An explanation in a dispute between the author and Dr. Isaac Hays.

—— 1831 C

Megalonyx laqueatus.

Monthly Amer. Jour. Geol., I, 45.

A notice of Harlan, R., 1831 B.

Fejérváry, Géza Jules de 1916 A

Beiträge zur Kenntnis von *Rana mehelyi* B[olka]y.

Mitt. Jahrb. Ungar. Geol. Reichsanst., XXIII, Heft 3, 131-155+"Berichtigung," pls. xi-xii, 22 text-figs.

Fejérváry, G. J. de—Cont'd 1917 A
Anoures fossiles des couches préglaciaires de Puspökfürdö en Hongrie, en considération spéciale du développement phylétique du sacrum chez les anoures.
Foldt. Kozl., XLVII, 1-38, pls. i-iii.
The bibliography presents 26 titles.

—— 1918 A
Contributions to a monography on fossil Varanidæ and on Megalanidæ.
Ann. Mus. Hungar., XVI, 341-467, pls. i, ii, 37 text-figs.
There is a copious bibliography of the subject.

—— 1919 A
Notes de nomenclature paléozoologique.
Bull. Soc. vaud. Sci. nat., LII, 317-324.

——
Quelques observations sur la loi de Dollo et l'epistréphogénèse en considération spéciale de la loi biogénétique de Hæckel.
Bull. Soc. vaud. Sci. nat., LIII, 343-372, 4 text-figs.

—— 1921 A
Remarques sur la position systématique des genres *Bufavus* et *Ranavus*.
Ann. Mus. Hungar., XVIII, 28-30.

——
Note sur l'emploi de quelques termes biologiques.
Ann. Mus. Hungar., XVIII, 181-185.

—— 1921 C
Kritische Bemerkungen zur Osteologie, Phylogenie und Systematik der Anuren.
Arch. Naturges., LXXXVII, A, Heft 3, 1-30.

—— 1925 A
Über Erscheinungen und Prinzipien der Reversibilität in der Evolution und das Dollo'sche Gesetz.
Palaeont. Zeitschr., VII, 173-181, 184.
Followed by remarks by several palæontologists.

Felix, J. 1891 A
Versteinerungen aus der mexicanischen Jura- und Kreide-Formationen.
Palaeontogr., XXXVII, 140-194, pls. xxii-xxx.

Felix, J.—Continued 1912 A
Vergleichende Bemerkungen zu den Mammutskeletten von Steinheim a. d. Murr (in Stuttgart) und von Borna (in Leipzig).
Sitz.-Ber. naturf. Ges. Leipzig, XXXIX, 1-8, 3 text-figs.

——, and H. **Lenk** 1891 A
Uebersicht über die geologischen Verhältnisse des mexicanischen Staats Puebla.
Palaeontogr., XXXVII, 117-139, pl. xxx.
Abstract in Geol. Mag. (3), VIII, 514.

Fenneman, Nevin M. 1916 A
Geology of Cincinnati and vicinity.
Geol. Surv. Ohio, Bull., XIX, 1-207, 2 maps, 12 pls., 59 text-figs.

Ferguson, Henry G. 1917 A
Placer deposits of the Manhattan district, Nevada.
Bull, U. S. Geol. Surv., DCXL., 163-193.

Fernandez, Miguel 1921 A
Schuppe, Haar und Haarscheibe der Saügetiere.
Anat. Anz., LIV, 506-526, 1 pl., 2 text-figs.
There are 26 papers cited in the bibliography.

Fiebiger, J. 1905 A
Ueber die Bauchflossen der Gobii.
Anat. Anz., XXVII, 140-155, 9 text-figs.

Field, Herbert Haviland 1895 A
Bemerkungen über die Entwicklung der Wirbelsäule bei den Amphibien; nebst Schilderung eines abnormen Wirbelsegmentes.
Morphol. Jahrb., XXII, 340-356, pls. xii, xiii.
This paper is followed by a bibliography of 15 titles.

Fielden, H. W. 1877 A
The post-tertiary beds of Grinnell Land and north Greenland.
Ann. Mag. Nat. Hist. (4), XX, 483-489.

——, and C. E. **DeRance** 1878 A
Geology of the coasts of the arctic lands visited by the late British expedition under captain Sir George Nares, R.N., K.C.B., F.R.S.
Quart. Jour. Geol. Soc., XXXIV, 556-567, pl. xxiv.

Figgins, J. D. 1921 A
Annual report of the Colorado Museum of Natural History for the year 1920, Denver.

—— 1922 A
Rep. Colorado Mus. Nat. Hist., 1921, 1-24.

Figgins, J. D.—Continued 1924 A

Figure of a mounted specimen of *Moropus*.

Rep. Colorado Mus. Nat. Hist., 1923, 17.

—— 1925 A

Report on collection of fossil vertebrates.

Rep. Colorado Mus. Nat. Hist., 1924, 1 plate.

—— 1928 A

How long has man hunted?

Outdoor Life, LXI, Feb., 18-19, 82, 7 figs.

——, and **H. J. Cook** 1927 A

The antiquity of man in America.

Scient. Monthly, May 1927, 477-479.

Filatoff, D. 1906 A

Zur Frage über die Anlage des Knorpelschädels bei einigen Wirbeltieren.

Anat. Anz., XXIX, 623-633, 8 text-figs.

—— 1907 A

Die Metamerie des Kopfes von *Emys lutaria*.

Morph. Jahrb., XXXVII, 289-396, pls. viii-x, 4 text-figs.

Appended is a bibliography of 30 titles.

Filatov, D. 1912 A

On the bison of the Caucasus.

Mém. Acad. Sci. St. Petérsb. (8), XXX, art. 8, 1-40, 4 pls., a map, 2 text-figs.

Printed in Russian. The author is the same as Filatoff, D.

Filhol, H. 1879 A

Étude des mammifères fossiles de Saint Gerand le Puy (Allier).

Ann. Sci. Géol. Paris, X, 1-253, pls. i-xxx.

—— 1889 A

Des liens qui rattachent la zoologie à la paléontologie.

C. R. Congr. internat. Zool., I, Paris, 1889, 209-224.

Finlay, George I. 1916 A

Description of the Colorado Springs quadrangle.

U. S. Geol. Surv. Folio, CCIII, 1-17, map and plates.

Finley, W. L. 1908 A

Life history of the California condor. Part II: Historical data and range of the condor.

Condor, X, 5-10, 4 photographs.

Finn, Frank 1894 A

The bird's foot.

Nat. Sci., V, 210-211.

Finn, Frank—Continued 1894 B

The significance of the bird's foot.

Nat. Sci., IV, 453-456.

For a note on this paper see Nat. Sci., V, 10.

Finney, Marian 1912 A

The limbs of *Lysorophus*.

Jour. Morphol., XXIII, 664-666.

Fischer, Erich 1903 A

Bau und Entwickelung des Carpus und Tarsus vom *Hyrax*.

Jena. Zeitschr. Naturwiss., XXXVII, 691-726, pl. xxxiii.

Fischer, Eugen 1901 A

Bemerkungen über das Hinterhauptgelenk der Säuger.

Anat. Anz., XIX, 1-6, 2 text-figs.

—— 1901 B

Das Primordialcranium von *Talpa europæa*.

Ein Beitrag zur Morphologie des Säugetierschädels.

Anat. Hefte, Arb., XVII, 467-548, pls. xxvii-xxxiii, 2 text-figs.

The bibliography comprises 54 titles.

—— 1903 A

Zur Entwicklungsgeschichte des Affenschädels.

Zeitschr. Morphol. Anthrop., V, 383-414, pls. xi, xii, 4 text-figs.

Appended is a full bibliography of the subject.

—— 1905 A

Die Nicht-Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz., Erganzungsh., XXVII, 139.

—— 1905 B

On the primordial cranium of *Tarsius spectrum*.

Proc. Akad. Wet. Amsterdam, VIII, 397-400.

For the German version see Versl. Wis. Nat. Afd. Akad. Wet., XIV, 404-407.

Fischer, Guido 1909 A

Beiträge zum Durchbruch der bleibenden Zähne und zur Resorption des Milchgebisses.

Anat. Hefte, Arb., XXXVIII, 617-716, pls. li-lxiv, 27 text-figs.

The bibliography comprises 93 titles.

Fischer, John Baptist 1829 A

Synopsis Mammalium.

8vo., i-xlii+1-752 pages.

Under the species are copious synonymical references.

Fischer, P. 1902 A

Zur Kenntnis des Primordialeraniums der Affen.

Anat. Anz., XX, 410-417, 1 fig.

Fischer de Waldheim, Gotthelf 1814 A
Zoögnosia tabulis synopticis illustrata.
8vo., vol. III, i-xxiv; 1-732, Mosquæ, 1814.

——— 1829 A
Notice sur quelques animaux fossiles de la Russie.
Nouv. Mém. Soc. Nat. Moscou, I, 281-299.
See also Edinb. Jour. Nat. Geogr. Soc., II, 453-454.

——— 1829 B
Notice sur le Mammout.
Bull. Soc. Natural. Moscou, I, 267-278.

——— 1832 A
Sur le Mastodonte et le Tétracaulodon.
Bull. Soc. Natural. Moscou, IV, 169-183.

Fisher, George Jackson 1888 A
Polydactylism in birds.
Auk, V, 218-219.

Fitzinger, Leopold J. 1836 A
Entwurf einer systematischen Anordnung der Schildkröten nach den Grundsätzen der natürlichen Methode.
Ann. Wien. Mus. Zool. Abh., I, 103-128.

——— 1842 A
Bericht über die in den Sandlagern von Linz aufgefunden fossilen Reste eines urweltlichen Säugers (*Halitherium cristolii*).
Ber. Mus. Franc.-Carl., Linz, VI, 61-72, 1 plate.

——— 1843 A
Systema reptilium.
Vindobonæ, 8vo., 1-106+i-vi, and index.

——— 1873 A
Versuch einer natürlichen Classification der Fische.
Sitz.-Ber. Akad. Wiss. Wien, math.-nat. Cl., LXVII, 5-58.

———, and **J. Heckel** 1836 A
Monographische Darstellung der Gattung *Acipenser*.
Ann. Wien. Mus. Zool. Abh., I, 261-326, pls. XXV-XXX.

FitzSimons, F. W. 1907 A
Layard's beaked whale (*Mesoplodon layardi* Flower).
Nature, LXXVI, 247-248, 2 figs.
This paper appeared also in Knowledge and Science, London, IV, 1907, 173-175.

Fleischmann, A. 1890 A
See Hay, O. P., 1902 A, 90.
English translation in Ann. Mag. Nat. Hist. (6), VI, 289-294.

Fleischmann, A.—Continued 1903 A
Das Kopfskelet der Amnioten. Morphogenetische Studien.
Morphol. Jahrb., XXXI, 560-564.
An introduction to a paper by Adolf Beecker.

——— 1904 A
Historisch-kritische Betrachtungen [über das Cribrum der Säugetiere.]
Morphol. Jahrb., XXXII, 479-504, 5 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 55-57.
A bibliography of 26 titles.

——— 1910 A
Über den Begriff "Gaumen." Kritische Betrachtungen.
Morphol. Jahrb. XLI, 681-707, 27 text-figs.
There is a bibliography of 15 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 37.

——— 1916 A
Die Kopfregion der Amnioten.
Morphol. Jahrb., L, 73-74.

Fleissig, Julius 1909 A
Zur Anatomie der Nasenhöhle von *Cryptobranchus japonicus*.
Anat. Anz., XXXV, 48-54, 5 figs.

Floderus, Matts 1910 A
Hästar med öfvertaliga tär [horses with supernumerary toes].
Fauna and Flora, Upsala, V, 97-111, pls.
The text is in Swedish.

Flot, L. 1885 A
Note sur l'*Halitherium schinzi*.
Bull. Soc. géol. France (3), XIII, 439-440, 1 fig.

——— 1887 A
Note sur *Prohalicore dubaleni*.
Bull. Soc. géol. France (3), XV, 134-138, pl. I.
Same as Flot, L., 1886 B, in Hay, O. P., 1902 A, 90.

Flower, W. H. 1868 C
On the development and succession of the teeth in the Marsupialia.
Phil. Trans. Roy. Soc. Lond., CLVII, 631-641, pls. XXIX, XXX.

——— 1870 A
On the correspondence between the parts composing the shoulder and the pelvic girdle of the Mammalia.
Jour. Anat. Physiol. Lond., IV, 239-245.

——— 1873 B
On palæontological evidence of gradual modification of animal forms.
Proc. Roy. Instn. Great Britain, 94-104, 1 plate.

Flower, W. H.—Continued 1874 B

Description of the skull of a species of *Halitherium* (*H. canhami*) from the Red Crag of Suffolk.

Quart. Jour. Geol. Soc., xxx, 1-7, pl. 1.

—— 1877 A

Note on the occurrence of the remains of *Hyænarctos* in the Red Crag of Suffolk.

Quart. Jour. Geol. Soc., xxxiii, 534-536, 2 figs.

—— 1878 A

A further contribution to the knowledge of the existing ziphoid whales.

Trans. Zool. Soc. Lond., x, 415-437, pls. lxxi-lxxiii, 4 text-figs.

—— 1882 C

On the cranium of a new species of *Hyperoodon* from the Australian seas.

Proc. Zool. Soc. Lond., 1882, 392-396, 2 text-figs.

—— 1883 E

On the whales of the genus *Hyperoodon*.

Proc. Zool. Soc. Lond. for 1882, 722-726.

—— 1884 A

Note on the dentition of a young capybara (*Hydrochœrus capybara*).

Proc. Zool. Soc. Lond., 1884, 252-253.

—— 1886 A

Mandibular and hyoid arches of *Hybodus dubrisiensis*.

Geol. Mag. (n.s.), iii, 1886, 285-286.

—— 1892 A

The horse: A study in natural history.

8vo., i-xiv+1-294 pages, 23 illustrations.

For abstract see Rev. Scient. Paris, xlix, 599.

——, and R. **Lydekker** 1891 A

Review in Geol. Mag. (3), viii, 418-422.

Foote, J. S. 1913 A

The comparative history of the femur.

Smithson. Misc. Coll., lxi, No. 8, 1-9, pls. i-iii.

—— 1916 A

A contribution to the comparative histology of the femur.

Smithson. Contrib. Knowl., xxxv, No. 3, i-ix+1-242 pages, pls. A-C; i-xxxv.

Edited by Aleš Hrdlička.

—— 1921 A

The circulatory system in bone.

Smithson. Misc. Coll., lxxii, art. 10, 1-72, pls. i-vi.

Forbes, Henry Ogg 1879 A

Shark's teeth.

Nature, xx, 456-457.

—— 1900 A

Catalogue of the lizard-tailed (*Saururœ*), the toothed (*Odontornithes*), and the ostrich-like (*Struthiones*) birds; and of the tinamous (*Tinami*), and the divers (*Colymbi*) in the Derby Museum.

Bull. Liverpool Mus., iii, 25-34.

A few fossil birds from North America are mentioned by name only.

Forbes, W. A. 1879 A

The glacial period and geographical distribution.

Nature, xix, 363-364.

—— 1880 A

On *Antilocapra americana*.

Proc. Zool. Soc. Lond., 1880, 540-543, 3 figs.

In his "Collected Scientific Papers," 1885, 127-131, 3 figs.

—— 1881 A

On the contributions to the anatomy and classification of birds made by the late Prof. Garrod, F.R.S.

Ibis, 1881, 1-32, 9 figs.

In Forbes' "Collected Scientific Papers," 1885, 189-213, figs. 1-9.

—— 1881 B

On the anatomy and classification of the petrels, based upon those collected by H. M. S. *Challenger*.

Rep. Brit. Assoc. Adv. Sci., 1881, 671.

In Forbes' "Collected Scientific Papers," 1885, 284.

—— 1882 A

On the variations from the normal structure of the foot in birds.

Ibis (4), vi, 386-390, 2 text-figs.

—— 1882 B

The claw on the "index" finger of the Cathartidæ.

Amer. Naturalist, xvi, 141-142.

—— 1882 C

On the rudimentary hallus of birds.

Proc. Zool. Soc. Lond., 1882, 548-549.

In Forbes' "Collected Scientific Papers," 359-360.

—— 1882 D

Report on the anatomy of the petrels (*Tubinares*) collected during the voyage of H. M. S. *Challenger*.

Chall. Rep. Zool., iv, pt. xi, 1-64, pls. i-vii.

In Forbes' "Collected Scientific Papers," 1885, 363-440, pls. xii-xxiv.

Forbes, W. A.—Continued 1882 E

On the variation from the normal structure of the foot in birds.

Ibis., 1882, 386-390, 2 figs.

In Forbes' "Collected Scientific Papers," 1885, 440-443.

Ford, John 1878 A

On a stone ax [and bone of *Canis*].

Proc. Acad. Nat. Sci. Phila., 1877 (1878), 305-306.

—— 1879 A

The leather turtle.

Amer. Naturalist, XIII, 633-637.

Forster, Andreas 1901 A

Beiträge zur Kenntniss der Entwicklungsgeschichte des Interparietale.

Zeitschr. Morphol., Anthrop., IV, 99-148, 6 pls., 45 text-figs.

—— 1905 A

Skeletsystem. Extremitätenskelet.

Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 89-138.

On pages 89-97 is a list of 177 titles of papers on the subject.

Fossa-Mancini, E. 1921 A

Alcune considerazioni sulla dietologia degli *Ptychodus*.

Atti Soc. Toscano Sci. Nat., XXXIII, 194-213.

There is a bibliography of 35 titles.

Foster, J. W. 1838 B

Review, unsigned, of W. W. Mather: First Annual Report on Geological Survey of Ohio.

Amer. Jour. Sci. (1), XXXIV, 347-362.

The internal evidence appears to show that this review was written by the assistant geologist, J. W. Foster.

—— 1838 C

Unsigned letter to editor on the jaw and teeth of "*Elephas jacksoni*," found in Ohio.

Amer. Jour. Sci. (1), XXXIV, 362-364, 3 figs.

Credited in Hay, O. P., 1902 A, 164, to W. W. Mather. It was quite certainly written by J. W. Foster.

—— 1839 A

Head of the *Mastodon giganteus*.

Amer. Jour. Sci. (1), XXXVI, 189-191, 2 figs.

Presents also figure of the type tooth of *Elephas jacksoni*.

—— 1851 A

On fossil fish in the coal rocks of Ohio.

Amer. Jour. Sci. (2), XII, 282-283.

No genera or species mentioned.

Foster, J. W.—Continued 1857 A

See Hay, O. P., 1902 A, 91.

Summary in Edinb. New Philos. Jour. (n.s.), V, 361-362.

—— 1869 A

On the antiquity of man in North America.

Trans. Chicago Acad. Sci., I, 227-257.

—— 1873 A

Pre-historic races of the United States of America.

8vo., i-xv+1-415 pages, 72 illustrations.

Fowke, Gerard 1902 A

Archæological history of Ohio: The mound builders and later Indians.

Published by the Ohio State Archæological and Historical Society, i-xvi+1-760 pages, 303 illustrations.

Fowler, Henry W. 1911 A

A description of the fossil fish remains of the Cretaceous, Eocene and Miocene formations of New Jersey.

Bull. Geol. Surv. New Jersey, IV, i-vi, 22-182, 108 figures and groups of figures.

Abstracts in Geol. Centralbl., XVIII, 379; Rev. crit. Paléozool., XVII, 80.

Fraas, E. 1889 B

Kopfstacheln von *Hybodus* und *Acrodus*, sog. *Ceratodus heteromorphus* Ag.

Jahresh. Ver. Naturk. Württemb., XLV, 233-240, pl. V, figs. 9-13.

—— 1895 A

Ein Fund von Skeletresten von *Hybodus* (*Hybodus hauffianus* E. Fraas).

Ber. oberrhein. geol. Ver., Badenweiler, XXVIII, 24-26, 1 fig.

—— 1900 A

Ueber die Markhöhle im Humerus von Elephas.

Corresp.-Bl. deutsch. Ges. Anthrop., XXXI, 38, 1 text-fig.

—— 1901 A

On the aqueous *vs.* aeolian deposition of the White River Oligocene of South Dakota.

Science (n.s.), XIV, 210-212.

—— 1901 B

Die fossilen Krokodile des weissen Jura.

Jahresh. Ver. Naturk., Württemb., LVII, cxxvi.

Fraas, E.—Continued 1901 C

Die Meerkrokodile (*Thalattosuchia* n. g.), eine neue Sauriergruppe der Juraformation.

Jahresh. Ver. Naturk., Württemb., LVII, 409-418.

Abstract in Geol. Centralbl., II, 510.

—— 1901 D

Labyrinthodon aus dem Buntsandstein von Teinach.

Jahresh. Ver. Naturk., Württemb., LVII, 318-320, 1 fig.

—— 1902 A

Wild-West, Reiseerinnerungen eines Geologen an die amerikanischen Felsengebinge und Prairien.

Die Gartenlaube, Feb. 4, 1902, 76-80, 4 illustrations.

A popular account of the author's journey.

—— 1902 B

Die Meer-krokodilier (*Thalattosuchia*) des oberen Jura unter specieller Berucksichtigung von *Dacosaurus* and *Geosaurus*.

Palæontogr., XLIX, 1-72, pls. i-viii, 7 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 98-101.

—— 1902 C

Geologische Streifzüge durch die Prärien und Felsengebirge Nordamerikas.

Jahresh. Ver. Naturk., Württemb., LVIII, lxv-lxviii.

—— 1903 A

Thalassemys marina E. Fraas aus dem oberen weissen Jura von Schnaitheim nebst Bemerkungen über die Stammesgeschichte der Schildkröten.

Jahresh. Ver. Naturk., Württemb., LIX, 72-104, pls. i-iii, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 173-174.

—— 1904 A

Neue Zeuglodonten aus dem unteren Mitteleocän vom Mokattam bei Cairo.

Geol. Pal. Abh. Jena, X, [(2), vi], 1-24, pls. i-iii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 486-492; Geol. Centralbl., V, 374; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 185-186; Jour. Geol. XVII, 183.

—— 1904 B

Weitere Beiträge zur Fauna des Jura von Nordost-Grönland.

Meddelelser om Grönland, XXIX, pt. 8, 277-285, 4 text-figs.

Briefly noted by R. Lydekker in Knowl. and Scient. News, II, 230.

Fraas, E.—Continued 1904 C

Vergleichung der amerikanischen und europaischen Juraformation.

Internat. Amerikanisten-Kongr., Stuttgart, 1904, Tag. XIV, 41-45.

—— 1905 A

Zur Stammesgeschichte der Waltiere.

Jahresh. Ver. Naturk., Württemb., LXI, lxiii.

—— 1905 B

Reptilien und Säugetiere in ihren Anpassungserscheinungen an das marine Leben.

Jahresh. Ver. Naturk., Württemb., LXI, 347-386, 5 text-figs.

Résumé in Ann. Soc. Zool. Belgique, XL, Bull., xcvii-cxvi.

Abstracts in Rev. crit. Paléozool., XII, 131, 269; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 155.

—— 1907 A

Säge von *Propristis schweinfurthi* Dames aus dem oberen Eocan von Agypten.

Neues Jahrb. Min. Geol. Pal., 1907, I, 1-6, pl. i.

Abstracts in Geol. Centralbl., X, 330; Sci. Progress, II, 523.

—— 1907 B

Aëtosaurus crassicauda n. sp., nebst Beobachtungen über das Becken der Aëtosaurier.

Jahresh. Ver. Naturk., Württemb., LXIII, 101-109, pls. i, ii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 436-437; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 168; Sci. Progress, II, 515.

—— 1908 A

Ostafrikanische dinosaurier.

Palaeontogr., LV, 105-144, pls. viii-xii, 6 text-figs.

Abstract in Nature, LXXIX, 166.

—— 1910 A

Plesiosaurier aus dem oberen Lias von Holzmaden.

Palaeontogr., LVII, 105-140, pls. vi-x, 11 text-figs.

See Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 139-141, for an abstract.

—— 1910 B

Alte und neue Dinosaurier-Funde.

Jahresh. Ver. Naturk. Württemb., LXVI, xciii-xciv.

Fraas, E.—Continued 1911 A

Embryonaler *Ichthyosaurus* mit Hautbekleidung.

Jahresh. Ver. Naturk., Württemb., LXVII, 480-487, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 477; Geol. Centralbl., XVIII, 46; Nature, LXXXVII, 197, 4 figs.

—— 1911 B

Die ostafrikanische Dinosaurier.

Verh. Ges. deutsch. Naturf., LXXXIII, pt. i, 27-41.

—— 1912 A

The hugest mammoth ever exhumed.

Scient. Amer. Suppl., LXXIII, 325.

—— 1913 A

Neue Labyrinthodonten aus der schwäbischen Trias.

Palaeontogr., LX, 275-294, pls. xvi-xxii, 5 text-figs.

—— 1913 B

Proterochersis, eine pleurodire Schildkkröte aus dem Keuper.

Jahresh. Ver. Naturk., Württemb., LXIX, 13-30, pls. iii, iv, 9 text-figs.

This paper forms No. 80 of the Mitt. Nat. Kab. Stuttgart.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 166.

—— 1913 C

Ein unverdrückter *Ichthyosaurus*-Schädel.

Jahresh. Ver. Naturk., Württemb., LXIX, 1-12, pls. i, ii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 165-166.

—— 1913 D

Über das Massensterben unter den Tieren und dessen Bedeutung für die Paläontologie.

Jahresh. Ver. Naturk., Württemb., LXIX, lxii-lxv.

Fraas, Oscar 1854 A

Squatina acanthoderma. Der Meerengel von Nusplingen.

Zeitschr. deutsch. Geol. Ges., VI, 782-799, pls. xxvii-xxix.

Fraipont, Charles 1912 A

Sur les ostracophores belges. (Résponse à M. M. Leriche.)

Bull. Soc. Belge Geol., XXVI, Proc.-verb., 66-69.

—— 1922 A

Observations sur les grands félidés pléistocènes.

Bull. Acad. Sci. Belgique (5), VIII, 577-580.

Fraser, C. McLean 1915 A

Ichthyological notes on the diagnosis of fish by means of scales and on *Mallotus villosus*.

Trans. Roy. Canad. Inst. XI, 109-118, pl. x.

Frassetto, Fabio 1903 A

Notes de craniologie comparée.

Ann. Sci. nat. (8), XVII, 143-363, pls. iii-xxii, 53 text-figs.

—— 1915 A

Lo scheletro degli arti nell' uomo e nei vertebrati. Filogenesi ed ontogenesi.

Bologna, 1915, Libreria editrice Licinio Cappelli, 1-163 pages, 95 text-figs.

Frech, Fritz 1897 A

Lethæa geognostica, I Theil. Lethæa palæozoica, 2. Bd. 1 Lief, 1-256, 13 tables, 3 maps, 31 figs., Stuttgart, 1897.

—— 1906 A

Über die Gründe des Aussterbens der vorzeitlichen Tierwelt.

Arch. Rassenbiol., III, 4th Heft, 469-498.

For abstract see Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 292-293.

—— 1907 A

Ueber die Klima-Aenderungen der geologischen Vergangenheit.

C. R. Congr. internat. geol., Mexico, 1906, X, 299-325.

—— 1919 A

Die Fährten von *Chirotherium*.

Neues Jahrb. Min. Geol. Pal., 1919, L, 109.

Abstract of a dissertation by Karl Willruth Halle (Saale), 1917, 48 pages, 4 pls.

——, and **Geinitz** (Eugen) 1903 A

Die Flora und Fauna des Quartärs.

Lethæa geognostica. Handb. d. Erdgeschichte. Edited by F. Frech, III Theil, II Bd, I Abth., 1-41, 12 pls., many text-figs.

Freeman, O. W. 1926 A

Mammoth bones found in loess of Washington.

Science (n.s.), LXIV, 477.

Frets, G. P. 1909 A

Ueber die Varietäten der Wirbelsäule und ihre Erblichkeit.

Anat. Anz. Ergänzungsh., XXXIV, 105-120, 4 text-figs.

Frets, G. P.—Continued 1910 A

Études sur les variétés de la colonne vertébrale.

Morphol. Jahrb., XLI, 558-576, pls. x, xi, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 100-101.

—— 1912 A

Beiträge zur vergleichenden Anatomie und Ontogonie der Nase der Primaten. I: Nase bei einigen catarrhinen Affen, Säugern und dem Menschen.

Morphol. Jahrb., XLIV, 409-463, 64 text-figs.

In the bibliography are 33 titles.

—— 1913 A

Beiträge zur vergleichenden Anatomie und Embryologie der Nase der Primaten. II: Die Regio ethmoidalis des Primordialcraniums mit Deckknochen von einigen platyrrhinen Affen.

Morphol. Jahrb., XLV, 557-726, pls. xviii-xx, 113 text-figs.

Freudenberg, Wilhelm 1910 A

Die Säugetierfauna des Pliocäns und Postpliocäns von Mexiko. I: Carnivoren.

Geol. Pal. Abh. Jena, IX (XIII), Heft 3, pls. i-ix, text-figs. 1-5; in complete volume, 193-231, pls. xx-xxviii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 311-312; Geol. Centralbl., XV, 721-722; Rev. crit. Paléozool., XV, 79; Sci. Progress, V, 667.

—— 1911 A

Abstract of J. C. Merriam: Skull and dentition of an extinct cat closely allied to *Felis atrox* Leidy (Merriam, J. C., 1909 A).

Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 134.

—— 1913 A

Elephas primigenius fraasi Dietrich und die schwäbische Hochterrasse.

Centralbl. Min. Geol. Pal., 1913, 475-480; 646-652.

—— 1914 A

A. Lotichius: Der Säbeltiger.

Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 501.

Review of paper by Lotichius (Lotichius, A., 1914 A.).

—— 1921 A

Geologie von Mexico.

8vo., i-viii+1-232 pages, 2 pls., 28 text-figs., 1921, Berlin, Borntraeger.

Freudenberg, Wilhelm—Cont'd 1922 A

Die Säugetierfauna des Pliocäns und Postpliocäns von Mexico. II Teil: Mastodonten und Elephanten.

Geol. Pal. Abh. Jena, XIV (XVIII), Heft 3, 1-76, pls. i-ix, text-figs. 1-28.

The literature is cited in foot-notes.

—— 1923 A

Plastische Rekonstruktion des Urmenschen von Heidelberg (*Homo heidelbergensis*).

Verh. Anat. Ges., XXXII, 122-129, 2 figs.

Followed by a discussion by Fischer, Stieve, Bluntchli, Weidenreich, Grosser, Lubosch, Aichel, Maurer.

—— 1926 A

Über *Elephas trogontherii* Pohl.

Palaeont. Zeitschr., VIII, 68-69.

Freund, L. 1902 A

Bemerkungen über den Bau der Mittelhand.

Verh. Ges. deutsch. Naturf., 74ste Vers., 2ter. Teil., 1stes Heft, 162-164.

—— 1904 A

Die Osteologie der Halicoreflosse.

Zeitschr. wiss. Zool., LXXVII, 363-397, pls. xiv, xv, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 116-117.

—— 1905 A

Das Sternum von *Halicore dugong*.

Zeitschr. Morphol. Anthrop., VIII, 425-438, pls. xxviii, xxix, 1 text-fig.

—— 1906 A

Die Hyperdaktylie.

Zeitschr. Tiermedizin, X, 110-117.

—— 1908 A

Beiträge zur Entwickelungsgeschichte des Schädels von *Halicore dugong* Erxl.

Semon's "Zool. Forschungsreisen," IV, Lfg. 4 (Denk. med. Ges. Jena, VII), 557-626, 50 text-figs.

Appended is a bibliography of 21 titles.

—— 1911 A

Zur Morphologie des harten Gaumens der Säugetiere.

Zeitschr. Morphol. Anthrop., XIII, 377-394, pl. xiv, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 37.

—— 1912 A

Zur Morphologie des harten Gaumens der Säugetiere.

Verh. internat. Zool.-Kongr., Graz, VIII, 1910, 557-558, 1 text-fig.

—— 1913 A

Neues über Sirenen.

Naturwiss. Berlin, I, 258-261, 2 figs.

Freund, L.—Continued 1914 A

Beiträge zur Entwicklungsgeschichte der Sirenen.

Morphol. Jahrb., XLIX, 353-388, pl. xvi, 22 text-figs.

—— 1914 B

Neues über die Skelettentwicklung bei den Sirenen.

Verh. Ges. deutsch. Naturf., LXXXV, Wien, 1913, Th. 2, Häfte 1, 706.

Freund, Paul 1892 A

Beiträge zur Entwicklungsgeschichte der Zahnanlagen bei Nagethieren.

Arch. mikr. Anat. Bonn., XXXIX, 525-555, pls. xxii, xxiii.

—— 1893 A

Contributions to the development of the tooth-rudiments in rodents.

Ann. Mag. Nat. Hist. (6), XI, 301-327.

Citation of the literature in foot-notes.

Frey, Hugo 1911 A

Vergleichend-anatomische Studien über die Hammer-Amboss-Verbindung der Säuger.

Anat. Hefte Arb., XLIV, 363-437, pls. xiv xxiv.

There is a bibliography of 26 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 38-40.

Frick, Childs 1918 A

Fauna of the Bautista badlands.

Bull. Geol. Soc. Amer., XXIX, 163 (abstract).

—— 1921 A

Extinct vertebrate faunas of the badlands of Bautista Creek and San Timoteo Cañon, southern California.

Bull. Dept. Geol. Univ. Calif., XII, 277-424, pls. xliii-l, 165 text-figs.

Abstracts in Rev. crit. Paléozool., XXVI, 134; Geol. Zentralbl., XXIX, 443-444.

—— 1926 A

The Hemicyoninæ and an American Tertiary bear.

Bull. Amer. Mus. Nat. Hist., LVI, 1-119, frontispiece, 3 tables, 62 text-figs.

Throughout this paper are numerous citations of the literature.

—— 1926 B

Tooth sequence in certain trilophodont tetrabelodont mastodons and *Trilophodon* (*Serridentinus*) *pojoaquensis*, new species.

Bull. Amer. Mus. Nat. Hist., LVI, 122-176, 27 figs.

—— 1926 C

Prehistoric evidence.

Nat. Hist., XXVI, 440-448, 3 figs.

Friedmann, Emil 1897 A

Beiträge zur Zahnentwicklung der Knochenfische.

Morphol. Arbeit., VII, 546-582, 16 text-figs.

There is presented a bibliography of 32 titles.

Fries, B. Fr. 1838 A

Ichthyologische Beiträge zur skandinavischen Fauna. Das Geschlecht *Syngnathus*.

Arch. Naturges., IV, 1, 237-250, pl. vi.

—— 1838 B

Metamorphose, bemerkt bei der kleinen Meernadel (*Syngnathus lumbriciformis*).

Arch. Naturges., IV, 1, 251-256, pl. vi.

Fries, C. 1924 A

Zur Phylogenie des Schildkrötenpanzers.

Zool. Anz., LXI, 277-280.

Fritsch, A. 1879 A

Review of Gaudry's "Sur les reptiles des temps primaires" (Gaudry A., 1878 A).

Neues Jahrb. Min. Geol. Pal., 1879, 720.

—— 1889 B

Abstract in Geol. Mag. (3), V, 523; (3), VIII, 375-378, 2 figs.

—— 1895 A

Abstract in Geol. Mag. (4), II, 40; (4), III, 83.

Froriep, August 1883 A

Zur Entwickelungsgeschichte der Wirbelsäule, insbesondere des Atlas und Epistropheus und der Occipitalregion. I: Beobachtung an Hühnerembryonen.

Arch. Anat. Entwickl., 1883, 177-234, pls. vii-ix; text-figs. 1-8.

There is a bibliography of 27 titles.

—— 1886 A

Zur Entwickelungsgeschichte der Wirbelsäule, insbesondere des Atlas und Epistropheus und der Occipitalregion. II: Beobachtung an Säugerthiere-embryonen.

Arch. Anat. Entwickl., 1886, 69-150, pls. i-iii, 8 text-figs.

The bibliography includes 19 titles.

—— 1887 A

Bemerkungen zur Frage nach der Wirbeltheorie des Kopfskelettes.

Anat. Anz., II, 815-835.

Froriep, August—Continued 1902 A

Zur Entwickelungsgeschichte des Wirbeltierkopfes.

Verh. Anat. Ges., xv, Bonn, 34-46, 5 text-figs.

—— 1905 A

Sur la genèse de la partie occipitale du crâne.

C. R. Assoc. Anatomistes, vii, 156-157.

—— 1905 B

Die occipitalen Urwirbel der Amnioten im Vergleich mitt denen der Selachier.

Verh. Anat. Ges., xix, Genf, 111-120, 4 text-figs.

Frost, Frederick H. 1927 A

Statistical identification as applied to *Parapavo.*

Bull. Dept. Geol. Univ. Calif., xvii, 57-62.

Frost, George Allan 1913 A

The internal cranial elements and foramina of *Dapedius granulatus,* from a specimen recently found in the Lias at Charmouth.

Quart. Jour. Geol. Soc., lxix, 219-222, 2 text-figs.

For review see Geol. Mag. (5), x, 234.

—— 1925 A

A comparative study of the otoliths of the neopterygian fishes.

Ann. Mag. Nat. Hist. (9), xv, 152-163, 553-561, pls. xi-xiii, xxix.

—— 1926 A

A comparative study of the otoliths of the neopterygian fishes (continued). Orders Haplomi, Heteromi, Incomi, Hypostomides, Salmopercæ, Synentognathi, Microcyprini, Solenichthyes, Anacanthini.

Ann. Mag. Nat. Hist. (9), xviii, 465-490, pls. xx-xxii.

—— 1927 A

A comparative study of the otoliths of the neopterygian fishes (continued). Orders Allotriognathi, Berycomorphi.

Ann. Mag. Nat. Hist. (9), xix, 439-445, pl. viii.

Fry, Edward 1850 A

Remarks on the morphology of the vertebrate skeleton.

Proc. Zool. Soc. Lond., xviii, 15-22.

Fryd, Carlos 1901 A

Die Otolithen der Fische in Bezug auf ihre Bedeutung für Systematik und Altersbestimmung.

Christ.-Albr.-Univ., Kiel. Inaug. Dissert., 1-54, 16 text-figs.

Fryxell, F. M. 1926 A

A horn of the prong-horn antelope (*Antilocapra americana*) found at Moline, Illinois.

Jour. Mamm., vii, 333-334.

Fuchs, Hugo 1905 A

Spezielle Anatomie und Entwicklungsgeschichte des Menschen und der Wirbeltiere. IV: Skeletsystem. A. Kopfskelet.

Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 33-91.

Pages 33-39 are occupied by a bibliography of the recent literature of the subject. The remainder of the paper consists of abstracts of the papers listed.

—— 1905 B

Bemerkungen über die Herkunft und Entwickelung der Gehörknöchelchen bei Kaninchen-Embryonen (nebst Bemerkungen über die Entwickelung des Knörpelskeletes der beiden ersten Visceralbogen).

Arch. Anat. Entwickl., 1905, 1-178, pls. i-iv.

References to other authors in foot-notes.

—— 1906 A

Untersuchungen über die Entwickelung der Gehörknöchelchen des Squamosums und des Kiefergelenkes der Säugertiere, nebst einigen vergleichend-anatomischen Betrachtungen über Articulare, Quadratum und Gehörknöchelchen.

Arch. Anat. Physiol. Leipzig, Supplem. Bd., 1906, 1-89, pls. i-vi, 4 text-figs.

For "Nachtrag" see Archiv, 1906, 117-118; also Anat. Anz., xxviii, 317-318.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 46-50.

—— 1907 A

Über die morphologische Bedeutung des Squamosums am Säugetierschädel.

Zeitschr. Morphol. Anthrop., x, 147-170, pl. xi, 2 text-figs.

References are made to works of other authors.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 50-51.

—— 1907 B

Untersuchungen über Ontogenie und Phylogenie der Gaumenbildungen bei den Wirbeltieren. I: Über den Gaumen der Schildkröten und seine Entwickelungsgeschichte.

Zeitschr. Morphol. Anthrop., x, 409-463, pls. xx, xxi, 8 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiii, pt. 3, 49-51.

Fuchs, Hugo—Continued 1907 C

Ueber die Entwickelung des Operculums der Urodelen und des Distelidiums (''Columella'' auris) einiger Reptilien.

Anat. Anz. Ergänsungsh., xxx, 8-34, pls. i, ii, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiii, pt. 3, 48.

—— 1907 D

Ueber das Hyobranchialskelett von *Emys lutaria* und seine Entwickelung.

Anat. Anz., xxxi, 33-39, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiii, pt. 3, 48.

—— 1908 A

Ueber das Vorkommen selbständiger knöcherner Epiphysen bei Sauropsiden.

Anat. Anz., xxxii, 352-360, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 120.

—— 1908 B

Ueber einen Rest des Parasphenoids bei einem rezenten Säugetiere.

Anat. Anz., xxxii, 584-590, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 50.

—— 1908 C

Untersuchungen über Ontogenie und Phylogenie der Gaumenbildungen bei den Wirbeltieren. II: Über das Munddach der Rhynchocephalen, Saurier, Schlangen, Krokodile und Säuger und den Zusammenhang zwischen Mund- und Nasenhöhle bei diesen Tieren.

Zeitschr. Morphol., Anthrop., xi, 153-248, pls. vi-viii, 23 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 47-50.

—— 1909 A

Ueber die morphologische Bedeutung der Sacralrippen.

Anat. Anz., xxxiv, 349-356, 526, 2 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 104-108.

—— 1909 B

Betrachtungen über die Schläfengegend am Schädel der Quadrupeda.

Anat. Anz., xxxv, 113-167, 25 text-figs.

—— 1909 C

Ueber die Entwickelung einiger Deckknochen (Vomer, Pterygoid, Maxillare) bei Säugetieren (und ihr Verhältnis zum Knorpelskelette).

Anat. Anz. Ergänzungsh., xxxiv, 85-104, pl. i, 12 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 45-49.

Fuchs, Hugo—Continued 1909 D

Beiträge zur Entwickelungsgeschichte und vergleichenden Anatomie des Brustschulterapparates der Wirbeltiere.

Zeitschr. Morphol. Anthrop., ii, 141-226, pls. vi-ix, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 166-168.

—— 1910 A

Ueber das Pterygoid, Palatinum und Parasphenoid der Quadrupeden, insbesondere der Reptilien und Säugetiere, nebst einigen Betrachtungen über die Beziehungen zwischen Nerven und Skeletteilen.

Anat. Anz., xxxvi, 33-95, 45 text-figs.

For a reply to this paper see Gaupp, E., 1910 B.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xvi, pt. 3, 40-41.

—— 1910 B

Bemerkungen über Monimostylie und Streptostylie. Einige berichtigende Bemerkungen zu der Versluys'schen Arbeit: ''Streptostylie bei Dinosauriern, etc.''

Anat. Anz., xxxvii, 250-256.

See Versluys, 1911 A, for rejoinder.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xvi, pt. 3, 41.

—— 1910 C

Ueber die Homologie der Paukenhöhlen und das Verhältnis zwischen Nervenverlauf und Skelett. Erwiderung auf die Arbeit des Herrn Dr. O. Bender: ''Nochmals die Homologie der Paukenhöhlen'' (Anat. Anz., Bd. 37, 1910, No. 4/5).

Anat. Anz., xxxvii, 473-496.

—— 1911 A

Ueber das Septomaxillare eines rezenten Säugetieres (*Dasypus*), nebst einigen vergleichend-anatomischen Bemerkungen über das Septomaxillare und Praemaxillare der Amnioten überhaupt.

Anat. Anz., xxxviii, 33-55, 16 text-figs.

For a review see Naturw. Wochenschrift, xxvi, 1911, 433; Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 40; Nature, lxxxvii, 197.

Fuchs, Hugo—Continued 1911 B

Über die Beziehungen zwischen den Theromorphen Cope's bezw. den Therapsiden Broom's und den Säugetieren, erörtert auf Grund der Schädelverhältnisse (nebst einem weiteren Beitrag zur Frage der Homologie des Kiefergelenkes und der morphologischen Bedeutung des Squamosums).

Zeitschr. Morphol. Anthrop., XIV, 367-438, 65 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 442; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 43.

—— 1911 C

Bemerkungen über das Munddach der Amnioten, insbesondere der Schildkröten und Schlangen.

Anat. Anz., XXXVIII, 609-637, 52 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 41-42.

—— 1911 D

Über correlative Beziehungen zwischen Zungen und Gaumenentwickelung der Säugerembryonen, nebst Betrachtungen über Erscheinungsformen progressiver und regressiver Entwickelung.

Zeitschr. Morphol., Anthrop., XIII, 97-130, 30 text-figs.

—— 1912 A

Ueber die Struktur des Reptiliengebisses und die Beziehung desselben zum Säugergebiss.

Anat. Anz. Ergänzungsh., XLI, 68.

—— 1912 B

Ueber einige Ergebnisse meiner Untersuchungen über die Entwickelung des Kopfskelettes von *Chelone imbricata* (Material Voeltskow).

Anat. Anz. Ergänzungsh., XLI, 81-106, 18 text-figs.

Followed by a list of 24 titles of papers pertaining to the subject discussed.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 52-55.

—— 1912 C

Bemerkungen über das Gebiss des *Erinaceus europæus*, gegründet auf das Fehlen eines unteren Incisivus.

Zeitschr. Morphol., Anthrop., XIV, 507-526, 4 text-figs.

Fuchs, Hugo—Continued 1912 D

Über Knorpelbildung in Deckknochen, nebst Untersuchungen und Betrachtungen über Gehörknöchelchen, Kiefer und Kiefergelenk der Wirbeltiere.

Arch. Anat. Entwickl., 1-256, pls. i-iv, 57 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 49-59.

—— 1913 A

Zur Richtigstellung. Erwiderung an Herrn Dr. O. Bender in München, in Sachen der Columella und Bicolumella auris.

Anat. Anz., XLIII, 59-64, 284-286.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 61.

—— 1913 B

Zur Antwort O. Benders.

Anat. Anz., XLIV, 301-303.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 61.

—— 1914 A

Zur Entwickelungsgeschichte der Zahnform und deren Anwendung auf das Primatengebiss.

Deutsche Monatsschr. Zahnheilk., XXXII, 24-44.

—— 1915 A

Structure and development of the skull of *Chelone imbricata*.

4to., Stuttgart, 325 pages. In German (Not seen).

—— 1920 A

Über die Verknöcherung des Innenskeletes am Schädel der Seeschildkröten, nebst Bemerkungen über das geschlossene Schläfendach.

Anat. Anz., LII, 353-389, 449-479, 24 figs.

—— 1920 B

Über die Verknöcherung der Innenskeletts am Schädel der Seeschildkröten, nebst Bemerkungen über das geschlossene Schläfendach (Fortsetzung).

Anat. Anz., LIII, 1-36; 353-371.

The bibliography presents 56 titles.

—— 1920 C

Die Homologie der Wirbeltiere.

Verh. Anat. Ges., XXIX, 92-94 (Discussion).

Fuchs, Hugo—Continued 1922 A

Beiträge zur Entwickelungsgeschichte und vergleichenden Anatomie des Brustschulterapparates der Wirbeltiere; Schultergürtel der Anura

Zeitschr. Morphol. Anthrop., XXII, 283-328, pls. i, ii, 3 text-figs.

The bibliography is found on pages 326-327.

—— 1926 A

Beiträge zur Entwickelungsgeschichte und vergleichende Anatomie des Brust-Schultergürtels der Wirbeltiere.

Verh. Anat. Ges., XXXV, 119-138, 6 figs.

In the bibliography are 14 titles.

—— 1926 B

Beiträge zur Entwickelungsgeschichte und vergleichenden Anatomie des Brustschultergürtels der Wirbeltiere. Fünfte Mitteilung.

Anat. Anz., LXI, 1-34, 4 figs.

Fuchs, Theodor 1900 A

Über die Natur der Edestiden, mit besonderer Rücksicht auf die Gattung *Helicoprion.*

Sitz.-Ber. Akad. Wiss. Wien., CIX, Abth. i, 5-9, 1 plate, 3 text-figs.

Abstracts in Geol. Centralbl., II, 315; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 132; Rev. crit. Paléozool., v, 69.

—— 1901 A

Ueber *Dæmonhelix krameri* Ammon.

Verhandl. geol. Reichsanst., 1901, 171-172.

Fürbringer, Karl 1903 A

Beiträge zur Kenntnis des Visceralskelets der Selachier.

Morphol. Jahrb., XXXI, 360-445, pls. xvi-xviii.

Appended is a bibliography of 65 titles.

—— 1904 A

Notiz über einige Beobachtungen am Dipnoerkopf.

Anat. Anz., XXIV, 405-408.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 58-59.

—— 1904 B

Beiträge zur Morphologie des Skelettes der Dipnoer, nebst Bemerkungen über Pleuracanthiden, Holocephalen, und Squaliden.

Denk. med.-naturw. Ges. Jena, IV, 423-510, pls. xxxvii-xli, 38 text-figs. (=Semon's "Zool. Forschungsr. in Austral.," vol. I, 423-510).

The bibliography comprises 85 titles.

Abstract in Jahresb. Anat., Entwickl. (N.F.), X, Abt. 3, 97-98.

Fürbringer, Max 1902 A

Morphologische Streitfragen. II: Rabl's Methode und Behandlung der Extremitätenfrage.

Morphol. Jahrb., XXX, 144-274.

Appended is a list of 297 titles of papers on the subject treated.

—— 1902 B

Zur vergleichenden Anatomie des Brustschulterapparates und der Schultermuskeln.

Jena. Zeitschr. Naturwiss., XXXVI, 289-736q, pls. xviii-xxii, text-figs. 180-262.

This paper deals principally with the anatomy of the muscles and nerves of birds. On pages 597-599 are cited treatises which deal more especially with the osteology of birds.

—— 1903 A

Notiz über oberflächliche Knorpelelemente im Kiemenskelet der Rochen (Extraseptalia), zugleich nach von J. Ed. Stumpff gemachten Beobachtungen.

Morphol. Jahrb., XXXI, 623-627, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 59.

—— 1904 A

Zur Frage der Abstammung der Säugetiere.

Denk. med.-naturw. Ges. Jena, XI, Festschr. 70sten. Geburtst. Ernst Haeckel, 571-604.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 59-61.

—— 1905 A

Die Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 17.

Brief remarks in discussion.

Fuller, M. L. 1912 A

The New Madrid earthquake.

Bull. U. S. Geol. Surv., CCCCXCIV, 1-119, pls. i-x, 18 text-figs.

——, and F. G. **Clapp** 1912 A

The underground waters of southwestern Ohio.

U. S. Geol. Surv. Water-supp. Pap. 259, 1-228, pls. and figs.

Fulton, A. R. 1883 A

Elephas americanus.

Howe's Annals of Iowa, II, 102-105.

Describes a tooth of a mastodon.

Fulton, T. Wemyss 1906 A

Observations on the otoliths of some teleostean fishes.

Rep. Fish. Board Scotland, XXIV, pt. iii, 48-82, pls. i-v.

References are made to 5 papers which treat the subject.

Funccius, Theodor 1909 A

I: Der Prothorax der Vögel und Säuger.

Morphol. Jahrb., XXXIX, 370-445, pls. xxi-xxiii, 20 text-figs.

This paper is preceded by an introduction by Dr. A. Fleischmann and followed by a bibliography of 41 titles.

Furlong, E. L. 1904 A

An account of the preliminary excavations in a recently explored Quaternary cave in Shasta County, California.

Science (n.s.), XX, 53-55.

Abstract in Geol. Centralbl., VII, 618.

—— 1905 A

Preptoceras, a new ungulate from the Samwel Cave, California.

Bull. Dept. Geol. Univ. Calif., IV, 163-169, pls. xxiv-xxv.

Abstracts in Geol. Centralbl., VIII, 374; X, 371; Rev. crit. Paléozool., X, 200.

—— 1906 A

The exploration of Samwel Cave.

Amer. Jour. Sci. (4), XXII, 235-247, 3 text-figs.

Abstract in Geol. Centralbl., XI, 106-107.

—— 1907 A

Reconnaisance of a recently discovered Quaternary cave deposit near Auburn, California.

Science (n.s.), XXV, 392-394.

This is known as the Hawver Cave.

Abstract in Sci. Progress, II, 502.

—— 1910 A

An aplodont rodent from the Tertiary of Nevada.

Bull. Dept. Geol., Univ. Calif., V, 397-403, 6 figs.

Describes *Aplodontia alexandræ*.

Abstract in Geol. Centralbl., XVI, 57.

—— 1925 A

Notes on the occurrence of mammalian remains in the Pleistocene of Mexico; with a description of a new species, *Capromeryx mexicana*.

Bull. Dept. Geol. Univ. Calif., XV, 137-152, 11 text-figs.

Abstract in Geol. Zentralbl., XXXIII, 46.

Furlong, E. L.—Continued 1927 A

The occurrence and phylogenetic status of *Merycodus* from the Mohave Desert Tertiary.

Bull. Dept. Geol. Univ. Calif., XVII, 145-186, pls. xxiv-xxviii, 28 text-figs.

—— See also **Stock** and **Furlong**.

——, and W. J. **Sinclair** 1904 A

Preliminary description of *Euceratherium collinum*.

Univ. of Calif., Publ. Amer. Arch. Ethn., II, 18, foot-note.

Gabb, William P. 1865 A

Communication on the San Luis Obispo quicksilver fossils.

Proc. Calif. Acad. Sci., III, 173-174.

Gadow, H. 1893 A

Vögel.

Bronn's Klassen und Ordnungen des Thierreichs.

Band VI; Abth. IV; Syst. Theil., i-vii+1-304 pages.

There is a copious bibliography.

—— 1896 C

Remarks on the supposed relationship of birds and dinosaurs.

Proc. Cambridge Philos. Soc., IX, 204-208.

—— 1901 A

The evolution of the auditory ossicles.

Anat. Anz., XIX, 396-411, 6 text-figs.

—— 1901 B

Amphibia and reptiles.

The Cambridge Natural History, 8vo., VIII, i-xiii+1-668 pages, 181 text-figs.

—— 1902 A

The evolution of horns and antlers.

Proc. Zool. Soc. Lond., 1902, I, 206-222, 1 text-fig.

—— 1902 B

The origin of the Mammalia.

Zeitschr. Morphol. Anthrop., IV, 345-364, 18 text-figs.

—— 1902 C

The wings and the skeleton of *Phalacrocorax harrisi*.

Novit. Zool., IX, 169-176, pls. xiv, xv.

—— 1902 D

Orthogenetic variations in the shells of Chelonia.

Arthur Willey's "Zoological Results," based on material from New Britain, New Guinea, etc., pt. 3, 207-222, pls. xxiv, xxv.

Gadow, H.—Continued 1905 A
The distribution of Mexican amphibians and reptiles.
Proc. Zool. Soc. Lond., 1905, II, 191-244, pls. vi, vii.
Deals also with the evolution of the region and the immigration and spreading of the Amphibia and Reptilia.

—— 1905 B
Orthogenetic variation.
Science (n.s.), XXII, 637-640.

—— 1910 A
Origin of vertebrates.
Proc. Linn. Soc. Lond., CXXII, 27-30.

—— 1910 B
Birds.
Encyclop. Brit., 11th ed., III, 959-978, 23 figs.

—— 1912 A
The one-sided reduction of the ovaries and oviducts in the Amniota, with remarks on mammalian evolution.
Proc. Zool. Soc. Lond., 1912, 808-821.

—— 1912 B
On the origin of feathers.
Arch. Naturges., LXXVIII, Abt. A, Heft. 7, 210-217, 7 text-figs.

—— 1913 A
The wanderings of animals.
Cambridge, Eng., i-viii+1-150 pages, 17 maps. One of the "Cambridge Manuals of Science."
The bibliography comprises 45 titles.

—— 1914 A
Presidential address before the section of zoology at the meeting in Birmingham, 1913.
Rep. Brit. Assoc. Adv. Sci., 83d Meet., Birmingham, 1913, 500-509.

—— 1916 A
Discussion on the "Biologia Centrali-Americana."
Proc. Zool. Soc. Lond., 1916, 544-545.

Gaillard, Claude 1898 A
Apparition des ours dés l'epoch miocène.
C. R. Acad. Sci. Paris, CXXVII, 1237-1239.
Describes *Ursus primævus*.

—— 1908 A
Les oiseaux des phosphorites du Quercy.
Ann. Univ. Lyon (n.s.), 1908, Fasc. 230, 1-178, pls. i-viii, 37 text-figs.
Pages 149 to 156 are a bibliography of the subject.

Ganin, M. 1880 A
Über die Entwicklung des Kopfskeletts bei Knochenfische (*Rhodeus*, *Gasterosteus*).
Zool. Anz., III, 140-143.

Ganzer, H. 1908 A
Über die Bewegungsbahn des Unterkiefers, insbesondere beim Menschen und bei den Nagertieren.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1908, 156-164.

Garbowski, Tad 1895 A
Zur Beurtheilung vertebraler Regionen bei Vögeln.
Anat. Anz., XI, 444-454, 2 figs.
There is a bibliography of 11 titles.

Gardner, James H. 1910 A
The Puerco and Torrejon formations of the Nacimiento group.
Jour. Geol., XVIII, 702-741, pl. i, 9 text-figs.
Abstract in Geol. Centralbl., XVI, 532-533.

Garman, S. 1884 E
Remarks on the disappearance of the ancient horses of America.
Proc. Bost. Soc. Nat. Hist., XXII, 252-253.

—— 1904 A
The chimæroids (Chismopnea Raf., 1815; Holocephala Müll., 1834), especially *Rhinochimæra* and its allies.
Bull. Mus. Comp. Zool., XLI, 243-272, pls. i-xv.

—— 1908 A
New Plagiostomia and Chismopnea.
Bull. Mus. Comp. Zool., LI, 249-256.

—— 1911 A
The Chismopnea (chimæroids).
Mem. Mus. Comp. Zool., XL, 81-101.

—— 1913 A
The Plagiostomia (Sharks, skates and rays).
Mem. Mus. Comp. Zool., XXXVI, i-xiv+1-515 pages, 77 plates.

—— 1917 A
The Galapagos tortoises.
Mem. Mus. Comp. Zool., XXX, 257-296, pls. i-xlii.

Garner, R. 1870 A
On the homologies in the extremities of the horse.
Rep. Brit. Assoc. Adv. Sci., XXXIX, Exeter, 1869, 121.

Garrod, A. H. 1872 A
Note on some of the cranial peculiarities of the woodpeckers.
Ibis (3), II, 357-360, 1 fig.

Garrod, A. H.—Continued 1873 C

On the value in classification of a peculiarity in the anterior margin of the nasal bones of certain birds.

Proc. Zool. Soc. Lond., 33-38, 11 text-figs.

—— 1873 D

On certain muscles of the thigh of birds and on their value in classification.

Proc. Zool. Soc. Lond., 1873, 626-644, 6 figs.

—— 1874 A

On certain muscles of birds and their value in classification. Pt. II.

Proc. Zool. Soc. Lond., 1874, 111-123.

—— 1874 B

On some points in the anatomy of the Columbæ.

Proc. Zool. Soc. Lond., 1874, 249-259, 2 figs.

—— 1876 A

On the anatomy of *Aramus scolopaceus.*

Proc. Zool. Soc. Lond., 1876, 275-277, 3 figs.

Gaskell, Walter Holbrook 1890 A

On the origin of vertebrates from a crustaceanlike ancestor.

Quart. Jour. Micr. Sci., xxxi, 379-444, pls. xxv-xxviii.

—— 1895 A

The origin of the vertebrates.

Proc. Cambridge Philos. Soc., ix, 19-47.

Pages 37-47 are occupied by a discussion of Dr. Gaskell's paper.

—— 1898 A

On the origin of vertebrates deduced from the study of *Ammocœtes.*

Jour. Anat. Physiol., Lond., xxxii (n.s. xii), 512-581, pl. xiii, 7 text-figs.

—— 1901 A

On the origin of vertebrates deduced from the study of *Ammocœtes.*

Jour. Anat. Physiol., Lond., xxxv (n.s. xv), 224-267, 12 figs.

—— 1905 A

On the origin of vertebrates.

Nature, lxxiii, 40-41.

—— 1908 A

The origin of the vertebrates.

i-x+1-537 pages, 168 text-figs.

The extensive bibliography occupies pages 501-515. Reviewed in Amer. Jour. Sci. (4), xxvii, 192; in Science (n.s.), xxix, 816-1818.

—— 1910 A

Origin of the vertebrates.

Proc. Linn. Soc. Lond., cxxii, 9-15.

Gass, J., and W. H. **Pratt** 1883 A

Bones of mammoth in Washington, Co., Iowa.

Proc. Davenport Acad. Sci., iii, 177-178.

Gaudry, Albert 1867 A

Animaux fossiles et géologie de l'Attique.

4to., Paris, 1862-1867, 1-475, atlas of 75 plates.

—— 1875 C

Sur une dent d'*Elephas primigenius,* trouvée sur la rivière Kouitchak dans l'Alaska.

Voyages à la côte nord-ouest de l'Amérique, 1870-1872, par Alph.-L. Pinart, 29-31, pl. A, figs. 1, 1a.

—— 1875 D

Sur une dent d'*Elephas primigenius,* trouvée par M. Pinard dans l'Alaska.

C. R. Acad. Sci. Paris, lxxv, 1281-1282.

—— 1875 E

Sur la découverte de batraciens proprement dits dans le terrain primaire.

C. R. Acad. Sci. Paris, lxxx, 441-443.

See also Jour. Zool. Paris, xiv, 38-41.

—— 1876 A

Les reptiles des schistes bitumineux d'Autun.

Bull. Soc. géol. France (3), iv, 721-723, pl. xxii.

—— 1884 A

Sur un sirénien d'espèce nouvelle trouvé dans le bassin de Paris.

Bull. Soc. géol. France (3), xii, 372-376, pl. xvii.

—— 1885 B

Nouvelle note sur les reptiles permiens.

Bull. Soc. géol. France (3), xiii, 44-51, pl. iv.

—— 1888 A

Sur les similitudes que plusieurs reptiles ont eues dans divers pays du monde vers la fin des temps primaires.

C. R. Congr. géol. internat., iii, Berlin, 1885, 1-4.

—— 1891 C

Die Vorfahren der Säugetiere in Europa.

Leipzig, i-viii+1-222 pages, 40 text-figs.

Translated from Albert Gaudry's Les ancêtres de nos animaux dans les temps géologiques. Paris, 1888.

—— 1892 B

Sur les charactères ostéologiques d'un *Mesoplodon sowerbyensis* mâle, échoué récemment sur le littoral de la France.

C. R. Acad. Sci. Paris, cxiv, 1283-1286.

Abstract in Rev. Scient., xlix, 730.

Gaudry, Albert—Continued 1893 A

L'éléphant de Durfort.

Extrait du volume du centenaire de la fondation du Muséum d'histoire naturelle. 1-25 pages, 1 double plate.

——— 1896 A

Essai de paléontologie philosophique; ouvrage faisant suite aux "Enchainements du monde animal dans les temps géologiques."

8vo., 1-231, 204 text-figs.

A review of this work by A. Tornquist appeared in Zool. Centralbl., IV, 1897, 680-685.

——— 1898 A

Rapport sur le concours du prix Cuvier.

C. R. Acad. Sci. Paris, CXXVI, 126-129.

——— 1901 A

Observations au sujet de la note de M. Priem.

Bull. Soc. géol. France (4), I, 504.

——— 1901 B

Sur la similitude des dents de l'homme et de quelques animaux.

Congr. internat. d'Anthrop., XII, Paris, 1900, 93-102, 513-525, 18 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 428-429.

——— 1902 A

Sur la patte antérieure des *Lophiodon*.

Bull. Soc. géol. France (4), II, 344.

——— 1902 B

Comparaison des dents de l'homme et des singes anthropomorphes.

C. R. Acad. Sci., Paris., CXXXIV, 269-270.

See also Bull. Soc. géol. France (4), II, 37.

——— 1903 A

Observations paléontologiques dans l'Alaska.

C. R. Acad. Sci. Paris, CXXXVII, 553-554.

——— 1906 A

Fossiles de Patagonie: Les attitudes de quelques animaux.

Ann. Paléont. Paris, I, 1-42, 53 text-figs.

Abstracts in Jahrb. Min. Geol. Pal., 1907, II, Ref., 136-147; Géol. Centralbl., VIII, 29.

——— 1906 B

Fossiles de Patagonie. Étude sur une portion du monde antarctique.

Ann. Paléont. Paris, I, 101-143 (fasc. III, 1-43), 25 text-figs.

Gaudry, Albert—Continued 1908 A

Fossiles de Patagonie. De l'économie dans la nature.

C. R. Acad. Sci. Paris, CXLVI, 1131-1134.

Gaupp, E. 1891 B

Die "Columella" der kionokranen Saurier.

Anat. Anz., VI, 107-117.

——— 1895 A

Ueber die Jochbogen-Bildungen am Schädel der Wirbelthiere.

Jahresber. Schles. Ges. vaterl. Kult., LXXII (1894), Abhl. II, Zool.-Bot., 56-63.

——— 1897 A

Die Entwickelung der Wirbelsäule.

Zool. Centralbl., IV, 533-550.

——— 1898 B

Die Metamerie des Schädels.

Anat. Hefte, Ergebn., VII, 793-885, 3 tables.

The bibliography comprises 91 titles.

——— 1899 A

Ontogenese und Phylogenese des schallleitenden Apparates bei den Wirbeltieren.

Anat. Hefte, Ergebn., VIII, 1898, 990-1149, 30 figs.

The bibliography embraces 95 titles.

——— 1900 A

Das Chondrocranium von *Lacerta agilis*.

Anat. Hefte, Arb., XV, 433-594, pls. xlii-xlvii.

Appended is a bibliography of 57 titles.

——— 1901 A

Ueber die Ala temporalis des Säugerschädels.

Anat. Anz., Ergänzungsh, XIX, 43.

——— 1901 B

Alte Probleme und neuere Arbeiten über den Wirbeltierschädel.

Anat. Hefte, Ergebn., X, 847-1001, 5 text-figs.

Pages 847-854 are a bibliography of the subject.

——— 1902 A

Ueber die Ala temporalis des Säugerschädels und die Regio orbitalis einiger anderer Wirbeltierschädel.

Anat. Hefte, Arb., XIX, 157-230, 15 figs.

There is a bibliography which includes 45 titles.

——— 1903 A

Zur Entwickelung der Schädelknochen bei den Teleostiern.

Anat. Anz. Ergänzungsh., XXIII, 113-123, 2 text-figs.

Gaupp, E.—Continued 1905 A

Neue Deutungen auf dem Gebiete der Lehre vom Säugetierschädel.

Anat. Anz., XXVII, 273-310, 9 text-figs.

—— 1905 B

Die Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 16, 17.

—— 1905 C

Die Nicht-Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 125-138, 7 text-figs.

See also Verh. Anat. Ges., XIX, Genf, 1905, 125-140, 7 figs.

—— 1905 D

Das Hyobranchialskelet der Wirbeltiere.

Anat. Hefte, Ergebn., XIV, 808-1048, 46 text-figs.

The citation of the literature of the subject occupies pages 809-823.

—— 1905 E

Die Nicht-Homologie des Unterkiefers in der Wirbeltierreihe.

C. R. Assoc. Anatomistes, VII, 159-161, 1 text-fig.; also in Verhandl. Anat. Ges., XIX, 125-140, 5 text-figs.

—— 1906 A

Ueber allgemeine und spezielle Fragen aus der Lehre vom Kopfskelett der Wirbeltiere.

Anat. Anz. Ergänzungsh., XXIX, 21-68, 16 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 52-55.

—— 1906 B

Die Entwickelung des Kopfskelettes.

Hertwig's "Handb. vergleich., experiment. Entwickelungslehre Wirbelth.," III, pt. 2, 573-874, text-figs. 324-406.

The list of works consulted is found on pages 855-873.

—— 1907 A

Demonstration von Präparaten, betreffend Knorpelbildung in Deckknochen.

Verh. Anat. Ges., XXI, Wurzburg, 251-252 (Anat. Anz., XXX, Ergänzungsh).

—— 1908 A

Ueber die Kopfgelenke der Säuger und des Menschen in morphologischer und funktioneller Beziehung.

Anat. Anz. Ergänzungsh., XXXII, 181-191, 1 text-fig.

Gaupp, E.—Continued 1908 B

Ueber Entwickelung und Bau der beiden ersten Wirbel und der Kopfgelenke von *Echidna aculeata*, nebst allgemeinen Bemerkungen über die Kopfgelenke der Amnioten.

Semon's "Zool. Forschungsr. in Austral.," III, 483-538, pl. lxvii, 20 text-figs. (Denkschr. Med. Ges. Jena, VI, pt. 2.)

A bibliography is found on pages 536-537.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 51, 92.

—— 1908 C

Zur Entwickelungsgeschichte und vergleichenden Morphologie des Schädels von *Echidna aculeata* var. *typica*.

Semon's "Zool. Forschungsr. in Austral.," III, 539-788, pls. lxviii-lxxv, 59 text-figs.

The extensive bibliography is found on pages 782-786.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 52-65.

—— 1910 A

Das Lacrimale des Menschen und der Säuger und seine morphologische Bedeutung.

Anat. Anz., XXXVI, 529-535, 14 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 42.

—— 1910 B

Erwiderung auf den Aufsatz von H. Fuchs: "Ueber das Pterygoid, Palatinum und Parasphenoid der Quadrupeden, etc."

Anat. Anz., XXXVII, 352-377.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 43.

—— 1910 C

Säugerpterygoid und Echidnapterygoid nebst Bemerkungen über das Säuger-palatinum und den processus basipterygoideus.

Anat. Hefte, Arb., XLII, 311-431, 41 text-figs.

There is a bibliography (pages 428-431) of 44 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 43-48.

—— 1910 D

Die Gehörknöchelchen- und Unterkiefer-Frage.

C. R. Congr. internat. Med., XVI, Budapest, 1909, sec. 1, 81-101.

There is a bibliography of 32 titles.

Gaupp, E.—Continued 1911 A

Ueber den N. trochlearis der Urodelen und über die Austrittsstellen der Gehirnnerven aus dem Schädelraum im allgemeinen.

Anat. Anz., XXXVIII, 401-444, 6 text-figs.

This paper is followed by an extensive list of the literature bearing on the subject.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 44.

—— 1911 B

Beiträge zur Kenntnis des Unterkiefers der Wirbeltiere. I: Der Processus anterior (Folii) des Hammers der Säuger und das Goniale der Nichtsäuger.

Anat. Anz., XXXIX, 97-135, 16 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 45-49.

—— 1911 C

Beiträge zur Kenntnis des Unterkiefers der Wirbeltiere. II: Die Zusammensetzung des Unterkiefers der Quadrupeden.

Anat. Anz., XXXIX, 433-473.

—— 1911 D

Beiträge zur Kenntnis des Unterkiefers der Wirbeltiere. III: Das Problem der Entstehung eines "sekundären" Kiefergelenkes bei den Säugern.

Anat. Anz., XXXIX, 609-666, 6 text-figs.

Following this paper is a bibliography of 112 titles.

—— 1912 A

Nachträgliche Bemerkungen zur Kenntnis des Unterkiefers der Wirbeltiere, insonderheit der Amphibien.

Anat. Anz., XL, 561-569.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 448.

—— 1912 B

Die Verwandtschaftsbeziehungen der Säuger, vom Standpunkte der Schädelmorphologie aus erörtert.

Verh. internat. Zool.-Kongr., VIII, Graz, 1910, 215-240, 11 text-figs.

Brief abstract in Nature, LXXXIV, 319; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 49.

—— 1913 A

Die Reichertsche Theorie (Hammer-, Amboss- und Kieferfrage).

Arch. Anat. Entwickl., 1912, Suppl.-Band., i-xiii+1-416 pages, 149 text-figs.

The extensive bibliography occupies pages 397-416.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 55-67.

Gawrilenko, A. 1924 A

Die Evolution des Karpus bei den Proboscidiern. Nebst Bemerkungen über phylogenetisches Altern.

Anat. Anz., LVIII, 218-244, 5 figs.

Gebhardt, F. A. M. Walter 1907 A

Ueber das älteste geologisch bekannte Vorkommen von Knochengewebe (Placodermen).

Anat. Anz. Ergänzungsh., XXX, 72-89.

Geddes, A. C. 1912 A

The origin of the vertebrate limb.

Jour. Anat., Physiol. Lond., XLVI, 350-383, 26 text-figs.

The article is followed by an extensive bibliography.

Gegenbaur, C. 1862 A

Ueber Bau und Entwickelung der Wirbelsäule bei Amphibien überhaupt, und beim Frosche insbesondere.

Abh. naturf. Ges. Halle, VI, 179-194, pl.

—— 1862 B

Untersuchungen zur vergleichenden Anatomie der Wirbelsäule bei Amphibien und Reptilien.

4to., Leipzig, 72 pages, 4 pls. (not seen).

—— 1863 A

Vergleichend-anatomische Bemerkungen über das Fussskelet der Vögel.

Arch. Anat. Entwickl. 1863, 450-472.

—— 1864 B

Ein Fall von erblichem Mangel der Pars acromialis Claviculæ mit Bemerkungen über die Entwickelung der Clavicula.

Jena. Zeitschr. Naturwise., I, 1-16.

—— 1864 C

Ueber die episternalen Skelettheile und ihr Vorkommen bei den Säugethieren und beim Menschen.

Jena. Zeitschr. Naturwiss., I, 175-195, pl. iv.

—— 1864 D

Ueber die Bildung des Knochengewebes.

Jena. Zeitschr. Naturwiss., I, 343-369, pl. viii.

—— 1865 C

Upon the episternal portions of the skeleton, as they appear in Mammalia and man.

Nat. Hist. Rev., V, 545-567, 11 figs.

From Jena. Zeitschr. Naturwiss, I, 175 seq.

—— 1866 A

Ueber den Brustgürtel und die Brustflosse der Fische.

Jena. Zeitschr. Naturwiss., II, 121-125.

Gegenbaur, C.—Continued 1867 A

Ueber primäre und secundäre Knochenbildung mit besonderer Beziehung auf die Lehre vom Primordialcranium.

Jena. Zeitschr. Naturwiss., III, 54-73.

—— 1867 B

Ueber die Entwickelung der Wirbelsäule des *Lepidosteus*, mit vergleichend-anatomischen Bermerkungen.

Jena. Zeitschr. Naturwiss., III, 359-420, pls. vii-ix.

—— 1870 A

Ueber das Gliedmaassenskelet der Enaliosaurier.

Jena. Zeitschr. Naturwiss., V, 332-359, pl. xiii.

Abstract in Jour. Anat. Physiol. Lond., IV, 308.

—— 1870 B

Ueber die Modificationen des Skelets der Hintergliedmaassen bei den Männchen der Selachier und Chimären.

Jena. Zeitschr. Naturwiss., V, 448-568, pl. xvi.

—— 1870 C

Ueber das Skelet der Gliedmaassen der Wirbelthiere im Allgemeinen und der Hintergliedmaassen der Selachier insbesondere.

Jena. Zeitschr. Naturwiss., V, 397-447, pls. xv, 7 text-figs.

—— 1871 A

Beiträge zur Kenntniss des Beckens der Vögel.

Jena. Zeitschr. Naturwiss., VI, 157-220, pls. v-vii, 5 text-figs.

There are, as foot-notes, numerous references to other authors.

—— 1871 B

Ueber die Kopfnerven von *Hexanchus* und ihr Verhältniss zur "Wirbeltheorie" des Schädels.

Jena. Zeitschr. Naturwiss, VI, 497-559, pl. xiii.

—— 1879 A

Zur Gliedmassenfrage. An die Untersuchungen v. Davidoff's angeknüpfte Bemerkungen.

Morphol. Jahrb., V, 521-525.

—— 1880 A

Kritische Bemerkungen über Polydactylie als Atavismus.

Morphol. Jahrb., VI, 585-596.

An English abridged translation is found in Jour. Anat. Physiol. Lond., XVI, 615-622.

Gegenbaur, C.—Continued 1888 A

Über polydactylie.

Morphol. Jahrb., XIV, 394-406.

Geikie, James 1894 A

The great ice age and its relation to the antiquity of man.

Third edition. London, 8vo., i-xxviii+1-850 pages, 18 maps, charts, 77 text-figs.

—— 1914 A

The antiquity of man in Europe.

Edinburgh, 8vo., i-xx+328 pages, pls. i-xxi, 9 text-figs., 4 maps.

Geinitz, E. 1903 A

Das Quartär Nordeuropas.

Frech's "Lethæa geognostica." III Th., II Bd., 42-304, numerous illustrations. (Continued in next.)

—— 1904 A

Das Quartär Nordeuropas.

Frech's "Lethæa geognostica," III Th., II Bd., 305-430, numerous illustrations.

The work cited here under Geinitz, E., 1903 A and 1904 A, abounds in references to the literature of the European Pleistocene.

Geinitz, H. B. 1847 B

Ueber die Auffindung von Ueberresten des *Basilosaurus* oder *Zygodon* im Allgemeinen und die des *Basilosaurus* oder *Hydrarchus* von Koch im Besonderen.

In Carus, C. G., 1847 A, 1-4.

——, and J. V. **Deichmüller** 1882 B

Nachträge zur Dyas II.

Mitt. Mus. Dresden, Heft 5, 1-46, pls. i-ix.

This is identical with Geinitz und Deichmüller, 1882 A.

—— See **Frech** and **Geinitz.**

Gelderen, Chr. van 1922 A

On the development of the sternum in reptiles.

Proc. Akad. Wet. Amsterdam, XXIV, 221-236, 7 figs.

—— 1923 A

On the development of the shoulder girdle and episternum in reptiles.

Proc. Akad. Wet. Amsterdam, XXVI, 15-31, 6 figs.

—— 1925 A

Die Entwicklung des Brustschulterapparats bei Sauriern.

Anat. Anz., LIX, 495-508, 4 figs.

Gemmellaro, M. 1921 A

Il *Neosqualodon assenzæ* Forsyth Major sp., del Museo Geologico della Universitá.

Gior. Sci. nat. econ. Palermo, xxxii, 121-154, 1 pl.

References to literature in foot-notes.

Gemminger, M. 1852 A

Ueber eine Knochenplatte im hinteren Sklerotikalsegment des Augus einiger Vögel.

Zeitschr. wiss. Zool., iv, 215-220, pl. xi.

Geoffroy St.-Hilaire, E. F. 1807 A

Sur les poissons, où l'on compare les pièces osseuses de leurs nageoires pectorales avec les os de l'extrémité antérieure des autres animaux à vertèbres.

Ann. Mus. hist. nat. Paris, ix, 357-372, pl. xix.

Abstract in Isis von Oken, ii, 1818, 1049-1052.

—— 1807 B

Considérations sur l'os furculaire, une des pièces de la nageoire pectorale.

Ann. Mus. hist. nat. Paris, ix, 413-427.

Abstract in Isis von Oken, ii, 1818, 1052-1055.

—— 1807 C

Sur les poissons, où l'on traite de leur sternum sous les point de vue de sa détermination et de ses formes générales.

Ann. Mus. hist. nat. Paris, x, 87-104, pl. iv.

Abstract in Isis von Oken, ii, 1818, 1055-1059.

—— 1807 D

Détermination des pièces qui composent le crâne des crocodiles.

Ann. Mus. hist. nat. Paris, x, 249-263, pl. v.

Abstract in Isis von Oken, ii, 1818, 275-279.

—— 1807 E

Considerations sur les pièces de la tête osseuse des animaux vertébrés, et particulièrement sur celles du crâne des oiseaux.

Ann. Mus. hist. nat. Paris, x, 342-365, pl. xxvii.

Abstract in Isis von Oken, ii, 1818, 279-283.

—— 1812 A

Tableau des quadrumanes.

Ann. Mus. hist. nat. Paris, xix, 85-122, 156-170.

Geoffroy St.-Hilaire, E. F.—Cont'd

1817 A

Du squelette des poissons ramené dans toutes ses parties à la charpente osseuse des autres animaux vertébrés, et premièrement de l'opercule des poissons.

Bull. Soc. Philom. Paris, 1817, 125-127.

For abstract see Isis von Oken, ii, 1818, 1419-1421; Bull. Soc. Philom. Paris, 1917, 125.

—— 1817 B

De la charpente osseuse des organes de la respiration dans les poissons, ramenée aux mêmes parties des autres animaux vertébrés.

Bull. Soc. Philom. Paris, 1817, 185-189.

For review see Isis von Oken, ii, 1818, 1422-1425; Bull. Soc. Philom. Paris, 1817, 185.

—— 1822 A

Sur les tiges montantes des vertèbres dorsales, pièces restreintes dans les mammifères à un état rudimentaire et portées chez les poissons au maximum du développement; pour servir à l'intelligence de la notice sur le "gaour."

Mém. Mus. hist. nat. Paris, ix, 76-88.

—— 1822 B

Considérations générales sur la vertèbre.

Mém. Mus. hist. nat. Paris, ix, 89-119, pls. v-vii.

—— 1824 A

Sur l'analogie des filets-pêcheurs de la baudroie avec une partie des apophyses montantes des vertèbres, et specialement avec les premiers rayons de la nageoire dorsale des silures.

Mém. Mus. hist. nat. Paris, xi, 132-142.

—— 1824 B

Sur une nouvelle détermination de quelques pièces mobiles chez la carpe, ayant été considérées comme les parties analogues des osselets de l'oreille; et sur la nécessité de conserver le nom de ces osselets aux pièces de l'opercule.

Mém. Mus. hist. nat. Paris, xi, 143-160, 258-260.

—— 1824 C

Sur la nature, la formation et les usages des pierres qu'on trouve dans les cellules auditives des Poissons.

Mém. Mus. hist. nat. Paris, xi, 241-257.

Geoffroy St.-Hilaire, E. F.—Cont'd

1824 D

De l'aile operculaire ou auriculaire des poissons, considérée comme un principal pivot, sur lequel doit rouler toute recherche de détermination des pièces composant le crâne des animaux; suivi de tableaux synoptiques donnant le nombre et expliquant la composition de ces pièces.

Mém. Mus. hist. nat. Paris, XI, 420-444, pl. xxi.

—— 1824 E

Sur une chaîne d'osselets découverte chez quelques poissons osseux, et annoncés comme les analogues des osselets de l'oreille.

Bull. Soc. Philom. Paris, 1824, 100-102.

—— 1824 F

Considérations et rapports nouveaux d'anatomie comparée concernant les mammifères à sabots.

Ann. Sci. nat., I, 80-83.

—— 1824 G

Observations sur les prétendus osselets de l'ouie trouvés par Ernest-Henri Weber.

Ann. Sci. nat., I, 436-440.

—— 1824 H

Composition de la tête osseuse de l'homme et des animaux.

Ann. Sci. nat., III, 173-192, 245-299 pl. xvi.

—— 1825 A

Sur quelques objections et remarques concernant l'aile operculaire ou auriculaire des poissons.

Mém. Mus. hist. nat. Paris, XII, 13-17.

—— 1825 B

Sur leurs affinités naturelles, desquelles résulte la nécessité d'une autre distribution générique, *Gavialis*, *Teleosaurus*, et *Steneosaurus;* etc.

Mém. Mus. hist. nat. Paris, XII, 97-155, pls. v, vi.

—— 1825 C

Mémoire sur les gavials.

Bull. Soc. Philom., Paris, 1825, 13-15.

—— 1832 A

Observations sur la concordance des parties de l'hyoide dans les quatre classes des animaux vertébrés, accompagnant, a titre de commentaire, le tableau synoptique, ou cette concordance est exprimée figurativement.

Nouv. Ann. Mus. hist. nat. Paris, I, 320-356, pl. xiii.

Geoffroy St.-Hilaire, Isidore 1835 A

Sur le genre cheval, et specialement sur l'hémione (*Equus hemionus* Pall).

Nouv. Ann. Mus. hist. nat. Paris, IV, 97-120, 1 pl.

Geol. Mag. 1912 A

The Permian Amphibia and Reptilia of North America.

Geol. Mag. (5), IX, 519-520.

A review of two publications issued by E. C. Case and one by S. W. Williston.

—— 1914 A

The type of *Pliolophus vulpiceps* Owen.

Geol. Mag. (6), I, 480.

Gervais, Paul M. 1839 A

See Hay, O. P., 1902 A, p. 97.

Abstract in Neues Jahrb. Min. Geogn. Geol., 1840, 120.

—— 1852 A

Zoologie et paléontologie française (animaux vertébrés).

Vol. I, i-iv+1-271 pages (Table methodique); vol. II (not continuously paged. Explication des planches); vol. III (Atlas de 45 planches).

First edition, issued in parts 1848-1852.

—— 1853 B

Sur la comparaison des membres chez les animaux vertébrés.

Ann. Sci. nat. (3), XX, 21-69.

—— 1853 C

Note sur le genre *Hyœnarctos*.

Ann. Sci. nat. (3), XX, 229-237, pl. xii.

—— 1855 B

Recherches sur les mammifères fossiles de l'Amérique méridionale.

Ann. Sci. Nat. (4) III, 330-338, pl. v.

See also C. R. Acad. Sci. Paris, 1855, 1112-1114.

—— 1856 A

Remarques sur les caractères que l'on peut tirer du sternum des oiseaux.

Ann. Sci. nat. (4), VI, 5-16.

—— 1859 A

Zoologie et paléontologie français.

Deuxième édition, accompagné d'un atlas de 84 planches et de figures intercalées dans le texte.

—— 1861 A

Note sur la première dentition de l'hyène.

Ann. Sci. nat. (4), XV, 142-148.

—— 1868 A

Sur un crâne de *Ziphius cavirostris* de Corse.

Mém. Acad. Sci. Lett. Montpellier, VII, 141-142, pl. v.

Gervais, Paul M.—Continued 1871 B

Sur le genre *Squalodon*.

Mém. Acad. Sci. Lett. Montpellier, VII, 79-91, pls. ii, iii.

—— 1873 B

Mémoire sur plusiers espèces de mammifères fossiles propres à l'Amérique méridionale.

Mém. Soc. géol., France (2), IX, art. 5. 1-44 pls. xxi-xxix.

—— 1875 A

Remarks ostéologiques à propos du mazame d'Amérique.

Alph.—L. Pinart's Voyages à la côte de l'Amérique, 49-51, pl. D.

See also Jour. Zool., Paris, IV, 263-266.

—— 1878 A

See Hay, O. P., 1902 A, p. 97.

English translation in Ann. Mag. Nat. Hist. (5), III, 95-96.

Gessner, Ignaz 1921 A

Ueber die Gliederung der Rippen bei den Säugetieren.

Anat. Anz., LIV, 271-273.

Ghigi, Alessandro 1900 A

Sui denti dei Tapiridi.

Anat. Anz., Ergänzungsh., XVIII, 17-29, 9 text-figs.

—— 1900 B

Sull' origine dell molari dei mammiferi.

Riv. ital. Pal., VI, 98-107.

Gibbes, Charles Drayton 1882 A

Prehistoric foot-prints in the sandstone quarry of the Nevada State Prison.

Proc. Calif. Acad. Sci., V, 1-8, 4 views of the prison yard and 3 sheets showing footprints.

—— 1882 B

Fossil jaw of mammoth.

Proc. Calif. Acad. Sci., V, 9-10, 1 plate. Appended is a note on large bird tracks on the floor of the quarry at Carson City, Nevada.

Gibbs, Morris 1898 A

Horns of American antelope.

Pop. Sci. News, XXXII, 198.

Gibian, Annie 1912 A

Beiträge zur Kenntnis des Hyobranchialskeletes der Haie. Eine vergleichend-embryologische Untersuchung.

Morphol. Jahrb., XLV, 57-96, pl. iv, 13 text-figs.

Appended is a bibliography of 19 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 67-69.

Gidley, J. W. 1900 A

Abstract in Geol. Centralbl., II, 156.

—— 1901 A

Tooth characters and revision of the North American species of the genus *Equus*.

Bull. Amer. Mus. Nat. Hist., XIV, 91-142, pls. xviii-xxi, 27 text-figs.

Abstracts in Science (n.s.), XIV, 699; Amer. Jour. Sci. (4), XV, 1903, 161; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 122-123; Geol. Centralbl., III, 27; Rev. crit. Paléozool., VII, 12.

—— 1902 A

A fossil armadillo from Texas.

Amer. Mus. Jour., II, 24-25.

—— 1903 A

On two species of *Platygonus* from the Pliocene of Texas.

Bull. Amer. Mus. Nat. Hist., XIX, 477-481, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 469; Geol. Centralbl., VI, 53; Jahresber Anat. Entwickl. (N.F.), X, Abth. 3, 183; Rev. crit. Paléozool., IX, 6.

—— 1903 B

A new three-toed horse.

Bull. Amer. Mus. Nat. Hist., XIX, 465-476.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 468-469; Geol. Centralbl., V, 461; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 184; Rev. crit. Paléozool., IX, 5.

—— 1903 C

The fresh-water tertiary of northwestern Texas. American Museum expeditions of 1899-1901.

Bull. Amer. Mus. Nat. Hist. XIX, 617-636, pls. lii-lviii, 4 text-figs.

—— 1904 A

New or little known mammals from the Miocene of South Dakota. American Museum Expedition of 1903. Pt. I: Geological notes; pt. III: Dicotylidæ.

Bull. Amer. Mus. Nat. Hist., XX, 241-246; 265-268, figs. 14, 15.

Abstracts in Jahrb. Min. Geol. Pal., 1905, 127-130; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 174-175; Geol. Centralbl., VII, 424.

—— 1904 B

Proper generic names of Miocene horses.

Bull. Amer. Mus. Nat. Hist., XX, 191-194.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref. 468; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 182; Geol. Centralbl., VII, 424; Rev. crit. Paléozool., IX, 5.

Gidley, J. W.—Continued 1904 C

Remarks on Pliocene fossils found in California.

Bull. Dept. Geol. Univ. Calif., IV, 57, 72, 75.

—— 1906 A

A fossil raccoon from a California Pleistocene cave deposit.

Proc. U. S. Nat. Mus., XXIX, 553-554, pl. XII.

Abstracts in Geol. Centralbl., VIII, 373; Sci. Progress, I, 452; Rev. crit. Paléozool., X, 140.

—— 1906 B

A new ruminant from the Pleistocene of New Mexico.

Proc. U. S. Nat. Mus., XXX, 165-167, figs. 1-3. Describes *Liops zuniensis*.

Brief abstracts in Geol. Centralbl. XI, 107; Sci. Progress, I, 452.

—— 1906 C

New or little-known mammals from the Miocene of South Dakota.

Bull. Amer. Mus. Nat. Hist. XXII, 135-153, 20 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 129-130; Geol. Centralbl., XI, 381; Rev. crit. Paléozool., X, 199; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 166.

—— 1906 D

A new genus of horse from the Mascall beds, with notes on a small collection of equine teeth in the University of California.

Bull. Amer. Mus. Nat. Hist., XXII, 385-388, 1 text-fig.

Abstract in Geol. Centralbl., XI, 473.

—— 1906 E

Evidence bearing on tooth-cusp development, based on a study of the Mesozoic mammals.

Science (n.s.), XXIII, 665-666.

Abstract in Rev. crit. Paléozool., XI, 9.

—— 1906 F

Evidence bearing on tooth-cusp development.

Proc. Wash. Acad. Sci., VIII, 91-106, pls. IV, V, 2 text-figs.

Review in Amer. Jour. Sci. (4), XXII, 546-547. Abstracts in Geol. Centralbl., XI, 107; Sci. Progress, I, 455; Rev. crit. Paléozool., XI, 9.

—— 1907 A

Revision of the Miocene and Pliocene Equidæ of North America.

Bull. Amer. Mus. Nat. Hist., XXIII, 865-934.

Abstracts in Geol. Centralbl., XI, 380; Rev. crit. Paléozool., XII, 231.

Gidley, J. W.—Continued 1907 B

A new horned rodent from the Miocene of Kansas.

Proc. U. S. Nat. Mus., XXXII, 627-636, pls. LVIII-LXV, 1 text-fig.

Abstracts in Geol. Centralbl., XI, 379; Sci. Progress, II, 508; Rev. crit. Paléozool., XII, 1; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 172.

—— 1908 A

Descriptions of two new species of Pleistocene ruminants of the genera *Ovibos* and *Bootherium*, with notes on the latter genus.

Proc. U. S. Nat. Mus., XXXIV, 681-684, pls. LVII-LIX.

Abstracts in Rev. crit. Paléozool., 13, 74, Amer. Jour. Sci. (4) XXVIII, 412; Geol. Centralbl., XII, 596; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 162; Sci. Progress, III, 454.

—— 1908 B

Notes on a collection of fossil mammals from Virgin Valley, Nevada.

Bull. Dept. Geol., Univ. Calif., V, 235-242.

Abstract in Geol. Centralbl., XIII, 203.

—— 1909 A

Notes on the fossil mammalian genus *Ptilodus*, with descriptions of new species.

Proc. U. S. Nat. Mus., XXXVI, 611-626, pl. LXX, 9 text-figs.

Abstracts in Geol. Centralbl., XIV, 488; Amer. Jour. Sci. (4), XXVIII, 411-412. Nature, vol. LXXXI, 204; Sci. Progress, IV, 649, 664, 1 pl.

—— 1909 B

Remarks on a restoration of *Basilosaurus cetoides*.

Science (n.s.), XXXI, 519.

—— 1911 A

[Collection of bones and teeth made at Brunswick, Ga.]

Bull. Geol. Survey Georgia, XXVI, 436.

—— 1912 A

The lagomorphs an independent order.

Science (n.s.), XXXVI, 285-286.

Abstract in Geol. Centralbl., XX, 702.

—— 1912 B

Symposium on ten years progress in vertebrate paleontology. Perissodactyla.

Bull. Geol. Soc. Amer., XXIII, 179-181.

For the other articles of this symposium see the 1912 papers of Matthew, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston, and Sinclair.

Gidley, J. W.—Continued 1912 C

Paleontogical evidence bearing on the problem of the origin of the American aborigines.

Amer. Anthrop., XIV, 18-23.

—— 1913 A

A recently mounted zeuglodon skeleton in the United States National Museum.

Proc. U. S. Nat. Mus., XLIV, 649-654, pls. lxxxi, lxxxii, 3 text-figs.

Abstracts in Geol. Centralbl., XX, 146; Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 134; Sci. Progress, VIII, 637; Nature, XCI, 355.

—— 1913 B

Preliminary report on a recently discovered Pleistocene cave deposit near Cumberland, Maryland.

Proc. U. S. Nat. Mus., XLVI, 93-102, 8 text-figs.

Abstracts in Geol. Centralbl., XX, 703-704; Nature, London, XCV, 35.

—— 1913 C

Some new American pycnodont fishes.

Proc. U. S. Nat. Mus., XLVI, 445-449, 6 text-figs.

Abstract in Rev. crit. Paléozool., XVIII, 58.

—— 1913 D

An extinct American eland.

Smithson. Misc. Coll., LX, No. 27, 1-3, pl. i.

Abstracts in Geol. Centralbl., XIX, 525; Sci. Progress, VIII, 631; Nature, XCI, 595.

—— 1913 E

Notice of the occurrence of a Pleistocene camel north of the Arctic Circle.

Smithson. Misc. Coll., LX, No. 26, 1-2.

Abstracts in Sci. Progress, VIII, 633; Nature, XCI, 595.

—— 1913 F

Notes on the relative ages of the beds at Archer, at Mixon's, and at Ocala, Fla., and their correlation with deposits of the western plains region.

U. S. Geol. Surv. Water-supp. Pap., CCXIX, 142-143.

—— 1913 G

A newly discovered cave deposit near Cumberland, Maryland.

Smithson. Misc. Coll., LX, No. 30, 49-50, 1 fig.

Abstract in Nature, XCIV, 468.

—— 1914 A

Remarks on *Ptilodus*.

Bull. Geol. Soc. Amer., XXV, 141.

Gidley, J. W.—Continued 1914 B

Further exploration of the Cumberland Pleistocene cave deposit.

Smithson. Misc. Coll., LXIII, No. 8, 16-18, figs. 18, 19.

—— 1915 A

An extinct marsupial from the Fort Union, with notes on the Myrmecobidæ and other families of this group.

Proc. U. S. Nat. Mus., XLVIII, 359-402, pl. xxiii.

Reviewed in Nature, London, XCV, 97; Rev. crit. Paléozool., XX, 39; Neues Jahrb. Min. Geol. Pal., 1917, I, 107; Geol. Mag. (6), II, 430.

—— 1915 B

Notes on the possible origin of the bears.

Jour. Wash. Acad. Sci., V, 333-334.

—— 1915 C

Fossil collecting at the Cumberland cave deposit.

Smithson. Misc. Coll., LXV, No. 6, 12-15, figs. 13, 14.

—— 1915 D

Report on fossils found in phosphate mines in Florida.

Bull. U. S. Geol. Surv., DCIV, 19, 20, 21, 68. (Matson, G. C., 1916 A.)

—— 1915 E

Report on fossils found in Cannonball division of the Lance formation, Montana.

Jour. Geol., XXIII, 538-539.

—— 1916 A

The Indiana mastodon.

Smithson. Misc. Coll., LXVI, No. 3, 28-29, 1 fig.

Reported mastodon found at Winamac, Ind.

—— 1917 A

Notice of a new Paleocene mammal, a possible relative of the titanotheres.

Proc. U. S. Nat. Mus., LII, 431-435, pl. xxxvi, 1 text-fig.

—— 1917 B

Report on Wasatch fossils.

U. S. Geol. Surv. Profess. Pap., CVIII, 59.

Forms part of Wegemann, C. H., 1917 A.

—— 1917 C

Report on fossils found in Manhattan district, Nevada.

Bull. U. S. Geol. Surv., 640-J, 182.

—— 1918 A

Brief report on vertebrate paleontology in U. S. National Museum for 1917.

Rep. U. S. Nat. Mus., 1917 (1918), 59-60.

Gidley, J. W.—Continued 1918 B

[On Wasatch fossils of the Powder River basin, Wyoming.]

U. S. Geol. Surv. Profess. Paper., CVIII, 59.

—— 1918 C

Identification of mammalian fossils from northeastern Montana.

U. S. Geol. Surv. Profess. Paper., CVIII, 180-182.

—— 1919 A

Significance of divergence of the first digit in the primitive mammalian foot.

Jour. Wash. Acad. Sci., IX, 273-280.

Abstract in Sci. Progress, XIV, 242.

—— 1919 B

New species of clænodonts from the Fort Union (Basal Eocene) of Montana.

Bull. Amer. Mus. Nat. Hist., XLI, 541-555, pl. XXVIII.

Abstract in Rev. crit. Paléozool., XXIV, 142.

—— 1919 C

[Notes in Peterson, O. A., 1919 A.]

Ann. Carnegie Mus., XXII, 61-62, 63.

—— 1920 A

Pleistocene peccaries from the Cumberland cave deposit.

Proc. U. S. Nat. Mus., LVII, 651-678, pls. liv, lv, 13 text-figs.

Abstracts in Rev. Geol. et Sci. con., IV, 1923, 91-92; Neues Jahrb. Min. Geol. Pal., 1923, I, 318.

Review in Rev. crit. Paléozool., XXVII, 10.

—— 1920 B

A Pleistocene cave deposit in western Maryland.

Rep. Smithson. Instn. for 1918, 281-287, pls. i-vi.

Abstracts in Geol. Zentralbl., XXVII, 362; XXIX, 124.

—— 1922 A

Review of W. K. Gregory's "The origin and evolution of the human dentition."

Jour. Mamm., III, 268-269.

—— 1922 B

Preliminary report on fossil vertebrates of the San Pedro Valley, Arizona, with descriptions of new species of Rodentia and Lagomorpha.

U. S. Geol. Surv. Profess. Paper, CXXXI, 119-130, pls. xxxiv, xxxv.

Abstracts in Geol. Zentralbl., XXX, 253; XXXI, 218.

Gidley, J. W.—Continued 1923 A

Paleocene primates of the Fort Union, with discussion of relationships of Eocene primates.

Proc. U. S. Nat. Mus., LXIII, art. 1, 1-38, pls. i-v, 4 text-figs.

There is a bibliography of 46 titles.

Review in Rev. crit. Paléozool., XXVIII, 1924, 21.

—— 1923 B

Report on fossils found near Ligurta, Arizona.

Bull. U. S. Geol. Surv., DCCXXX, 31-32.

—— 1923 C

Observations on the Miocene species *Ursus primævus* Gaillard.

Jour. Mamm., IV, 240-243, pl. XXVII.

—— 1923 D

Report on fossil bones.

U. S. Geol. Surv. Water Supply Pap., CDXCVIII, 75.

—— 1924 A

Report on vertebrate fossils found at Manhattan Gulch, Nevada.

Bull. U. S. Geol. Surv., DCCXXIII, 69-70.

—— 1924 B

Report on fossils found in "Tiffany" zone, Colorado.

U. S. Geol. Surv. Profess. Paper., CXXXIV, 47.

—— 1925 A

Prehistoric remains in Florida.

Science (n.s.), LXII, Aug. 28, Suppl., p. x.

—— 1926 A

Fossil Proboscidea and Edentata of the San Pedro Valley, Arizona.

U. S. Geol. Surv. Profess. Pap., CXL, 83-95, pls. xxxii-xliv.

—— 1926 B

Fossil man associated with the mammoth in Florida.

Jour. Wash. Acad. Sci., XVI, 310.

—— 1926 C

Descriptions of fossil vertebrates from the shores of Lake Cochise, Arizona.

Amer. Jour. Sci. (5), XI, 481-485.

A part of Bryan and Gidley, 1926 A.

—— 1926 D

Fossil man in Florida.

Bull. Geol. Soc. Amer. XXXVII, 239-240 (abstract).

—— 1926 E

Identification of fossils from Cody shale (Cretaceous) and Wasatch (Eocene) formation.

U. S. Geol. Surv. Profess. Pap., CXLV, 16, 41.

Gidley, J. W.—Continued 1926 F
Description of fishes from the Ripley formation, Tennessee.
U. S. Geol. Surv. Profess. Pap., CXXXVII, 192, pl. lxxi.

—— 1927 A
An elephant hunt in Florida.
Smithson. Misc. Coll., LXXVIII, art 7, 48-51, fig. 54.

—— 1927 B
Investigating evidence of early man in Florida.
Smithson. Misc. Coll., LXXVIII, art. 7, 168-174, figs. 168-176.

—— 1927 C
A true marten from the Madison Valley (Miocene) of Montana.
Jour. Mamm., VIII, 239-242, 1 fig.

—— 1927 D
American wild horses.
Scient. Monthly, XXV, 265-271.

—— 1927 E
Preliminary list of species of Pleistocene vertebrates found at Melbourne, Florida.
Publ. Carnegie Instn. Wash., No. 322 B, 274.

——, and F. B. **Loomis** 1926 A
Fossil man in Florida.
Amer. Jour. Sci. (5), XII, 254-264.

—— See **Miller,** G. S., and J. W. **Gidley**

Giebel, Christoph G. 1848 B
Ueber das Milch-Gebiss des *Rhinoceros tichorhinus.*
Neues Jahrb. Min. Geogn. Geol., 1848, 28-33.

—— 1849 A
Schneidezähne bei *Rhinoceros tichorhinus.*
Neues Jahrb. Min. Geogn. Geol., 1849, 76-77.

—— 1855 A
Odontographie. Vergleichende Darstellung des Zahnsystemes der lebenden und fossilen Wirbelthiere.
Leipzig, 1855, i-xx+1-129, pages, pls. i-lii.

—— 1855 B
Der letzte Schwanzwirbel des Vogelskeletes.
Zeitschr. gesammt. Naturw., VI, 29-39.

—— 1855 C
[Abstracts of scientific papers.]
Zeitschr. gesammt. Naturw., VI, 139-141.
Abstracts of papers published in Amer. Jour. Sci., XIX, 1855, 131-133, 349-353, 444-446; and in Smithson. Contrib. Knowl., VII, art. v.

Giebel, Christoph G.—Cont'd 1865 A
Zur Characteristik der Pelekane.
Zeitschr. gesammt. Naturw., XXVI, 250-257.

—— 1865 B
Zur Osteologie des labradorischen Springers, *Jaculus labradorius.*
Zeitschr. gesammt. Naturw., XXV, 272-274.

—— 1865 C
Die Oeffnung im Jochfortsatz des Nagethierschädels.
Zeitschr. gesammt. Naturw., XXV, 427-432.

—— 1865 D
Osteologische Differenzen des gemeinen und des weissköpfigen Seeadlers. *Haliaëtos albicilla* und *Haliaëtos leucocephalus.*
Zeitschr. gesammt. Naturw., XXV, 505-507.

—— 1878 A
Marsh's Entdeckung der Reste eines riesenhaften Sauriers *Titanosaurus.*
Zeitschr. gesammt. Naturw. (3), III, 126-127.

—— 1878 B
Der Schädel von *Ovis montana.*
Zeitschr. gesammt. Naturw. (3), III, 849-851.

—— 1878 C
Die am Oberarm der Säugethiere vorkommenden Perforationen.
Zeitschr. gesammt. Naturw. (3), III, 853-855.

—— 1878 D
Gabel-Antilope, *Antilocapra americana* s. *A. furcifer.*
Zeitsch. gesammt. Naturw. (3), III, 856-861.

—— 1883 A
Mammalia.
Bronn's Klass. und Ordn. Bd., VI, Abth. 5, 1-576, pls. i-xcii.
This work appeared in parts from 1874 to 1883. For the continuation of the osteology see Leche, W., 1887 A. Throughout the work there are abundant references to the literature of the subject.

Giglioli, Enrico H. 1872 A
Intorno alcuni denti interessanti di cetodonti.
Rend. Reale Istit. Lombardo, V, fasc. xii, 3-16.

Gilbert, Charles H.—Continued 1913 A
Age at maturity of the Pacific coast salmon of the genus *Oncorhynchus*.
Bull. U. S. Bur. Fisheries, XXXII, 1912 (1914), (Doc., 767), 1-22, pls. i-xvii.

Gilbert, G. K. 1871 B
Notes on investigation at Cohoes with reference to the circumstances of the deposition of the skeleton of mastodon.
Rep. N. Y. State Mus., XXI, 129-148.

—— 1873 A
Surface geology of the Maumee Valley (Ohio).
Geol. Surv. Ohio, I, pt. i, Geology, 537-556, with map.

—— 1875 A
Report on the geology of portions of New Mexico and Arizona.
U. S. Geog. Explor. Surv. west 100 Merid., III, Geol., 503-567, pls. viii-xii, text-figs. 146-169.

—— 1890 A
Lake Bonneville.
Mon. U. S. Geol. Surv., I, i-xx+1-438 pages, tables i-xxx.

Gilbert, James Zaccheus 1908 A
Ancestors of our whales.
Bull. So. Calif. Acad. Sci., VII, 20-22, 2 pls.

—— 1910 A
Evesthes jordani a primitive flounder from the Miocene of California.
Bull. Dept. Geol., Univ. Calif., V, 405-411, pls. xli, xlii.
Abstract in Rev. crit. Paléozool., XIV, 237.

—— 1910 B
The fossils of Rancho la Brea.
Bull. So. Calif. Acad. Sci., IX, 11-51, with illustrations.
Abstr. in Geol. Centralbl., XV, 607.

Gill, E. Leonard 1923 A
The Permian fishes of the genus *Acentrophorus*.
Proc. Zool. Soc. Lond., 1923, 19-40, 16 figs.

—— 1923 B
An undescribed fish from the Coal Measures of Lancashire.
Ann. Mag. Nat. Hist. (9), XI, 465-471, 1 fig. Describes *Phanetorhynchus*.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 77.

Gill, Theodore 1861 B
On the classification of the Eventognathi or Cyprini, a suborder of Teleocephali.
Proc. Acad. Nat. Sci. Phila., 1861, 6-9.

Gill, Theodore—Continued 1861 C
Synopsis of the subfamily of Clupeinæ, with descriptions of new genera.
Proc. Acad. Nat. Sci. Phila., XIII, 33-38.

—— 1861 D
Observations on the genus *Cottus* and descriptions of two new species.
Proc. Bost. Soc. Nat. Hist., VIII, 40-42.

—— 1862 B
On the subfamily Argentinæ.
Proc. Acad. Nat. Sci. Phila., 1862, 14-15.

—— 1862 C
On the limits and arrangement of the family scombroids.
Proc. Acad. Nat. Sci. Phila., 1812, 124-127.

—— 1862 D
Note on the family of scombroids.
Proc. Acad. Nat. Sci. Phila., 1862, 328-329.

—— 1863 A
Descriptions of some new species of Pediculati, and on the classification of the group.
Proc. Acad. Nat. Sci. Phila., XV, 1863, 88-92.

—— 1863 B
Descriptions of the genera of gadoid and brotuloid fishes of western North America.
Proc. Acad. Nat. Sci. Phila., XV, 1863, 242-254.

—— 1863 C
Synopsis of the North American gadoid fishes.
Proc. Acad. Nat. Sci. Phila., XV, 1863, 223-242.

—— 1864 A
Review of Holbrook's "Ichthyology of South Carolina."
Proc. Acad. Nat. Sci. Phila., XVII, 89-94.

—— 1865 B
Note on the family of myliobatoids, and on a new species of *Aëtobates*.
Ann. Lyc. Nat. Hist. N. Y., VIII, 135-138.

—— 1865 C
Critical remarks on the genera *Sebastes* and *Sebastodes* of Ayres.
Proc. Acad. Nat. Sci. Phila. for 1864, 145-147.

—— 1865 D
Synopsis of the pleuronectoids of the eastern coast of North America.
Proc. Acad. Nat. Sci. Phila., XIV, 1864 (1865), 214-220.

Gill, Theodore—Continued 1865 E
Note on several genera of cyprinoids.
Proc. Acad. Nat. Sci. Phila., XVII, 1865, 69-70.

—— 1866 A
Prodrome of a monograph of the Pinnipedes.
Proc. Essex Inst., V, 3-13.

—— 1871 B
Synopsis of the primary divisions of the cetaceans.
Proc. Essex Inst., VI, 121-126.

—— 1871 C
The eared seals: A review of memoir on the eared seals, Otariadæ.
Amer. Naturalist, IV, 675-684.
A review of Allen, J. A., 1870 A.

—— 1872 B
Arrangement of the families of mammals and synoptical tables of characters of the subdivisions of mammals.
Smithson. Misc. Coll., XI, art. i, 1-vi+ 1-98 pages.

—— 1872 C
Arrangement of the families of fishes, or classes Pisces, Marsipobranchii, and Leptocardii.
Smithson. Misc. Coll., XI, art. ii, i-xlvi+ 1-49 pages.

—— 1873 E
The number of classes of vertebrates and their mutual relations.
Amer. Jour. Sci. (3), VI, 432-435.
Reprinted in Ann. Mag. Nat. Hist. (4), XIII, 71-73.

—— 1873 F
Catalogue of the fishes of the east coast of North America.
Smithson. Misc. Coll., XIV, art. ii, 1-50.

—— 1875 B
On the geographical distribution of fishes.
Ann. Mag. Nat. Hist. (4), XV, 251-255.
Reprinted with additions from Johnson's New Universal Encyclopedia.

—— 1876 A
The values of fossils as indices of formations.
Ann. Rep. U. S. Geol. Geogr. Surv. Terrs., 1874 (1876), 153.

—— 1877 A
The morphology of the antlers of the Cervidæ.
Bull. Philos. Soc. Wash., II, 135-136.

Gill, Theodore—Continued 1879 A
On the homology of the dentition of *Dinichthys* with that of recent lungfishes.
Geol. Surv. Ohio, 1875 (1879), Palaeont., II, 7-8.

—— 1881 A
Zoology.
Rep. Smithson. Instn. for 1880, 331-390.

—— 1882 A
Outline of a proposed subdivision of the Squali.
Bull. U. S. Nat. Mus., XVI, 967.

—— 1883 D
On the family and subfamilies of Carangidæ.
Proc. U. S. Nat. Mus., V, 487-493.
With very full synonymy and citations of writers.

—— 1883 E
Supplementary note on the Pediculati.
Proc. U. S. Nat. Mus., V, 551-556.

—— 1883 F
Note on the Pomatomidæ.
Proc. U. S. Nat. Mus., V, 557.

—— 1883 G
On the family and subfamilies of Carangidæ.
Proc. U. S. Nat. Mus., V, 487-493.

—— 1883 H
Natural history of mammals, Edentata, Insectivora.
Stand. Nat. Hist., V, 46-67 (Edentata); 135-177 (Insectivora).
Pages 46-67 were issued Oct. 18, 1883; pages 135-144, Dec. 26, 1883; pages 145-177, Jan. 18, 1884.
The citations are made under Gill, T., 1886 A and B.

—— 1884 E
On the mutual relations of the hemibranchiate fishes.
Proc. Acad. Nat. Sci. Phila., 1884, 154-166.

—— 1884 F
On the anacanthine fishes.
Proc. Acad. Nat. Sci. Phila., 1884, 167-183.
Presents a very full synonymy of the groups.

—— 1884 G
The osteological characteristics of the Lutjaninæ.
Proc. U. S. Nat. Mus., VIII, 351-355.

—— 1885 A
On the system of the Squali.
Proc. Biol. Soc. Wash., II, lxiii-lxiv pages.

Gill, Theodore—Continued 1885 B

The principles of zoogeography.

Proc. Biol. Soc. Wash., II, 1-39.

This paper was issued separately some time in 1884.

—— 1885 C

Teleostei.

Stand. Nat. Hist., III, 98-298, figs. 72-166.

—— 1886 A

Natural history of mammals, Monodelphia.

Stand. Nat. Hist., V, 46-67, figs. 19-27.

The pages here cited were issued Oct. 18, 1883.

—— 1886 B

Natural history of mammals, Insectivora.

Stand. Nat. Hist., V, 135-177, figs. 73-95.

Pages 135-144 were issued Dec. 26, 1883; pages 145-177, Jan. 18, 1884.

—— 1886 C

Scientific record for 1885, Zoology, Vertebrates.

Rep. Smithson. Instn. for 1885, 787-813.

—— 1888 B

The extinct scleroderms.

Amer. Naturalists, XXII, 828-830.

—— 1889 B

Gleanings among the pleuronectids, and observations on the name *Pleuronectes*.

Proc. U. S. Nat. Mus., XI, 593-606.

—— 1889 C

The halosauroid fishes typical of a special order.

Amer. Naturalists, XXIII, 1015-1016.

The new order Lyopomi is proposed.

—— 1889 D

The notocanthoid fishes as representatives of a peculiar order.

Amer. Naturalist, XXIII, 1016-1017.

The new order Heteromi is proposed.

—— 1890 A

On the relations of the Cycloptéroidea.

Proc. U. S. Nat. Mus., XIII, 361-376.

—— 1890 B

The osteological characteristics of the family Anguillidæ.

Proc. U. S. Nat. Mus., XIII, 157-160, with synonyms as family and subfamily names.

—— 1890 C

The osteological characteristics of the family Murænidæ.

Proc. U. S. Nat. Mus., XIII, 165-170.

With synonyms as family names.

Gill, Theodore—Continued 1893 B

A comparison of antipodal faunas.

Mem. Nat. Acad. Sci., VI, 91-124.

—— 1896 D

The differential characters of the syngnathid and hippocampid fishes.

Proc. U. S. Nat. Mus, XVIII, 153-159.

—— 1896 E

The differential characters of characinoid and erythrinoid fishes.

Proc. U. S. Nat. Mus., XVIII, 205-209.

With synonymy and citations of literature.

—— 1897 A

Amphibia or Batrachia.

Science (n.s.), VI, 446-447.

—— 1898 A

The determinants for the major classification of fish-like vertebrates (abstract).

Rept. Brit. Assoc. Adv. Sci., LXVII, Toronto, 1897, 696-697.

—— 1898 B

On the derivation of the pectoral member in terrestrial vertebrates.

Rep. Brit. Assoc. Adv. Sci., LXVII, Toronto, 1897, 697.

—— 1901 A

Former land connections between Asia and North America.

Science (n.s.), XIII, 307.

—— 1901 B

On the mode of progression and habits of some dinosaurs.

Science (n.s.), XIII, 787-788.

—— 1902 A

The first use of [the terms] mammals and mammalians.

Science (n.s.), XVI, 1034-1035.

—— 1902 B

Note on the names of the genera of peccaries.

Proc. Biol. Soc. Wash., XV, 38.

—— 1903 A

The bones of the shoulder girdle of fishes.

Science (n. s.), XVII, 255-256.

—— 1903 B

Homologies of anterior limb.

Science (n.s.), XVII, 488.

—— 1904 A

The name mammal and the idea expressed.

Rep. Smithson. Instn., 1903 (1904), 537-544.

—— 1904 B

"Horses" not horses.

Science (n.s.), XIX, 737-738.

Gill, Theodore—Continued 1905 A
A new introduction to the study of fishes.
Science (n.s.), XXI, 653-661.
An extended review of volume vii of the "Cambridge Natural History."

—— 1905 B
An interesting Cretaceous chimæroid egg-case.
Science (n.s.), XXII, 601-602.
Abstract in Geol. Centralbl., VIII, 378.

—— 1905 C
Origin of fresh-water faunas (abstract).
Rep. internat. Geogr. Congr., VIII, Washington, 617.

—— 1905 D
The sculpin and its habits.
Smithson. Misc. Coll., XLVII, pt. 3, 348-359, text-figs. 45-55.

—— 1905 E
The life history of the angler.
Smithson. Misc. Coll., XLVII, 500-516, pls. lxxiii-lxxv, text-figs. 94-103.

—— 1905 F
The tarpon and lady-fish and their relations.
Smithson. Misc. Coll., XLVIII, 31-46, pls. xvii-xxix, 7 text-figs.

—— 1905 G
The family of cyprinids and the carp as its type.
Smithson. Misc. Coll., XLVIII, 195-217, pls. xlv-lvii.

—— 1907 A
Systematic zoology: Its progress and purpose.
Science (n.s.), XXVI, 489-505.

—— 1907 B
The lumpsucker; its relationship and habits.
Smithson. Misc. Coll., L, 175-194, figs. 32-47.

—— 1908 A
The millers-thumb and its habits.
Smithson. Misc. Coll., LII, 101-116, figs. 26-39.

—— 1908 B
The story of the devil fish.
Smithson. Misc. Coll., LII, 155-180, figs. 40-54.

—— 1909 A
The selachians admitted as a distinct class.
Science (n.s.), XXIX, 193-194.

Gill, Theodore—Continued 1909 B
Classification of the true fishes.
Science (n.s.), XXIX, 837-838.

—— 1910 A
Classification of the edentates.
Science (n.s.), XXXII, 56.

—— 1910 B
First use of Amphibia in its modern sense.
Science (n. s.), XXXI, 958-959.

—— 1910 C
The structural characteristics and relations of the apodal fishes.
Science (n.s.), XXXI, 789-790.

—— 1912 D
Systematic zoology: Its progress and purpose.
Proc. internat. Zool. Congr., Boston, VII, 1907, 786-806.

Gilmore, C. W. 1902 A
Discovery of teeth in *Baptanodon*, an ichthyosaurian from the Jurassic of Wyoming.
Science (n. s.), XVI, 913-914.

—— 1903 A
Discovery of dental grooves and teeth in the type of *Baptanodon* (*Sauranodon*) Marsh.
Science (n. s.), XVII, 750.
Abstract in Geol. Centralbl., VI, 55.

—— 1905 A
Osteology of *Baptanodon* Marsh.
Mem. Carnegie Mus., II, 77-129, pls. vii-xii, 26 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 311; Ibid, 1909, I, 447; Geol. Centralbl., VIII, 378; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 162.

—— 1905 B
The mounted skeleton of *Triceratops prorsus*.
Proc. U. S. Nat. Mus., XXIX, 433-435, pls. i, ii.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, II, Ref., 136-137; Geol. Centralbl., XI, 108; Nature, LXXIII, 1906, 228, fig. 1; Knowledge, II, 304; Rev. Géol. et Sci. con., IV, 1923, 93.

—— 1906 A
Notes on some recent additions to the exhibition series of vertebrate fossils.
Proc. U. S. Nat. Mus., XXX, 607-611, pls. xxx-xxxv.
Abstracts in Geol. Centralbl., XI, 106; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 131; Rev. crit. Paléozool., X, 200.

Gilmore, C. W.—Continued 1906 B

Notes on osteology of *Baptanodon*.

Mem. Carnegie Mus., II, 325-337, pls. xxxvi-xxxviii, 13 text-figs.

Abstracts in Geol. Centralbl., XI, 108; Sci. Progress, I, 459; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 447; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 162.

—— 1906 C

Notes on a newly mounted skeleton of *Merycoidodon*, a fossil mammal.

Proc. U. S. Nat. Mus., XXXI, 513-514, pl. xii.

Brief abstracts in Geol. Centralbl., XI, 107; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 167.

—— 1907 A

The type of the Jurassic reptile *Morosaurus agilis* redescribed, with a note on *Camptosaurus*.

Proc. U. S. Nat. Mus., XXXII, 151-165, pls. xii, xiii, 9 text-figs.

Abstracts in Geol. Centralbl., XI, 333; Sci. Progress, II, 515; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref. 437; Rev. crit. Paléozool., XI, 146; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 169.

—— 1907 B

A new species of *Baptanodon* from the Jurassic of Wyoming.

Amer. Jour. Sci. (4), XXIII, 193-196, with 2 text-figs.

Brief abstract in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 441.

Abstract in Sci. Progress, II, 517.

—— 1908 A

Smithsonian exploration in Alaska in 1907 in search of Pleistocene fossil vertebrates.

Smithson. Misc. Coll., LI, 1-38, pls. i-xiii, 4 text-figs.

Abstract with figure in Nature, LXXVIII, 346.

Abstract in Geol. Centralbl., XII, 219.

—— 1909 A

Osteology of the Jurassic reptile *Camptosaurus*, with a revision of the species of the genus, and descriptions of two new species.

Proc. U. S. Nat. Mus., XXXVI, 197-332, pls. vi-xx, 48 text figs.

Abstracts in Amer. Jour. Sci. (4), XXVIII, 410; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 300-301; Geol. Centralbl., XIV, 490; Rev. crit. Paléozool., XIII, 204-206; Nature, LXXX, 378.

Gilmore, C. W.—Continued 1909 B

A new rhynchocephalian reptile from the Jurassic of Wyoming, with notes on the fauna of "quarry 9."

Proc. U. S. Nat. Mus., XXXVII, 36-52, with pl. xi and 3 text-figs.

Abstracts in Geol. Centralbl., XIV, 491; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 466; Rev. crit. Paléozool., XIV, 13; Nature, LXXXII, 74; Sci. Progress, IV, 668.

—— 1910 A

Leidyosuchus sternbergii, a new species of crocodile from the Ceratops beds of Wyoming.

Proc. U. S. Nat. Mus., XXXVIII, 485-502, pls. xxiii-xxix, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, 319; Nature, LXXXV, 288; Sci. Progress, V, 682.

—— 1911 A

[Remains of vertebrates found in the Ripley formation in Georgia.]

Bull. Geol. Surv. Georgia, XXVI, 208-209.

—— 1911 B

A new fossil alligator from the Hell Creek beds of Montana.

Proc. U. S. Nat. Mus., XLI, 297-302, pls. xxvi, xxvii, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 479; Geol. Centralbl., XVII, 42; Sci. Progress, VI, 572.

Review in Rev. crit. Paléozool., XVI, 6.

—— 1912 A

A new mosasauroid reptile from the Cretaceous of Alabama.

Proc. U. S. Nat. Mus., XLI, 479-484, pls. xxxix, xl, 3 text-figs.

Abstracts in Geol. Centralbl., XVII, 705; Neues Jahrb. Min. Geol. Pal., 1912, I, 137; Sci. Progress, VIII, 642.

Review in Rev. crit. Paléozool., XVI, 237. Abstract in Nature, XCII, 695.

—— 1912 B

The mounted skeletons of *Camptosaurus* in the United States National Museum.

Proc. U. S. Nat. Mus., XLI, 687-696, pls. lv-lxi, 4 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 362.

Review in Rev. crit. Paléozool., XVI, 233.

—— 1912 C

Remarks on the skeleton of the dinosaur, *Stegosaurus*.

Science (n.s.), XXXV, 972.

Abstract in Nature, XCI, 142.

—— 1912 D

Mosasaurian in Fox Hills? formation.

Folio U. S. Geol. Surv., No. 181, 2.

Gilmore, C. W.—Continued 1913 A

A new dinosaur from the Lance formation of Wyoming.

Smithson. Misc. Coll., LXI, art. 5, 1-5, 5 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, II, 512; Geol. Centralbl., XX, 704.

—— 1914 A

Osteology of the armored Dinosauria in the United States National Museum, with special reference to the genus *Stegosaurus*.

Bull. U. S. Nat. Mus., LXXXIX, 1-143, pls. i-xxxvii, 73 text-figs.

Abstracts in Nature, XCV, 276; XCVI, 152; Rev. crit. Paléozool., XXI, 46; Amer. Jour. Sci. (4), XLVII, 237-238; Geol. Zentralbl., XXII, 61.

—— 1914 B

A new ceratopsian dinosaur from the Upper Cretaceous of Montana, with note on *Hypacrosaurus*.

Smithson. Misc. Coll., LXIII, No. 3, 1-10, 2 plates, 3 text-figs.

Abstracts in La Nature, Paris, 1923, Sept. 29, 93, 3 figs.; Geol. Zentralbl., XXI, 623; XXVIII, 346.

—— 1914 C

A second occurrence of ichthyosaurian remains in the Benton cretaceous.

Science (n.s.), XXXIX, 210.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 511.

—— 1914 D

A fossil hunting expedition in Montana.

Smithson. Misc. Coll., LXIII, No. 8, 18-21, with figs. 20-22.

Abstract in Nature, XCIV, 468; XCV, 136.

—— 1915 A

Osteology of *Thescelosaurus*, an orthopodous dinosaur from the Lance formation of Wyoming.

Proc. U. S. Nat. Mus., XLIX, 591-616, pls. lxxix-lxxxii, 20 text-figs.

Abstract with figure in Nature, London, XCVI, 716.

Review in Rev. crit. Paléozool., XXVII, 208.

—— 1915 B

A new restoration of *Stegosaurus*.

Proc. U. S. Nat. Mus., XLIX, 355-357, pl. lii, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1922, I, 255; Geol. Mag. (6), II, 525.

—— 1915 C

[Brief descriptions of dinosaurs.]

Bull. U. S. Geol. Surv., DCXII, 52-54; 58-59, pls. x, xi, text-fig. 9.

Gilmore, C. W.—Continued 1915 D

Observations on new dinosaurian reptiles.

Jour. Wash. Acad. Sci., V, 411, 488.

See also Science (n.s.), XLI, 1915, 878.

—— 1915 E

On the fore limb of *Allosaurus fragilis*.

Proc. U. S. Nat. Mus., XLIX, 501-513, 7 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 136.

Review in Rev. crit. Paléozool., XXVII, 208.

—— 1915 F

On the genus *Trachodon*.

Science (2), XLI, 658-660.

Review in Rev. crit. Paléozool., XXVII, 208.

—— 1915 G

Hunting vertebrate fossils in Montana.

Smithson. Misc. Coll., LXV, No. 6, 15-17, figs. 15-16.

—— 1915 H

The fossil turtles of the Uinta formation.

Mem. Carnegie Mus., VII, 101-161, pls. xviii-xxvii, 22 text-figs.

Separates of this paper were distributed November 1915. On the cover of a copy issued by the Carnegie Museum is printed the date November 1916.

—— 1916 A

Description of a new species of tortoise from the Jurassic of Utah.

Ann. Carnegie Mus., X, 7-12, pls. i, ii, 2 text-figs.

Abstracts in Rev. crit. Paléozool., XXVII, 210; Geol. Zentralbl., XXIX, 187.

—— 1916 B

Mode of progression of *Ceratosaurus*.

Scient. Amer. Suppl., No. 2098, 187.

—— 1916 C

Description of two new species of fossil turtles, from the Lance formation of Wyoming.

Proc. U. S. Nat. Mus., L, 641-646, pls. xxxii-xxxv.

Abstract in Rev. crit. Paléozool., XXVII, 210.

—— 1916 D

Contributions to the geology and palæontology of San Juan County, New Mexico. 2: Vertebrate faunas of the Ojo Alamo, Kirtland and Fruitland formations.

U. S. Geol. Surv. Profess. pap., XCVIII, 279-308, pls. lxiv-lxxviii, text-figs. 28-42.

Abstract in Rev. crit. Paléozool. Paris, XXIV, 90-91.

Gilmore, C. W.—Continued 1917 A

Brachyceratops a ceratopsian dinosaur from the Two Medicine formation of Montana, with notes on associated fossil reptiles.

U. S. Geol. Surv. Profess. pap., CIII, 1-45, pls. i-iv, 57 text-figs.

Abstract in Geol. Zentralbl., XXVII, 412.

—— 1918 A

The armored dinosaur.

Scient. Monthly, VI, 475-477, 2 text-figs.

—— 1918 B

Report on vertebrate paleontology in U. S. National Museum for 1917.

Rep. U. S. Nat. Mus., 1917 (1918), 58-59, 62.

—— 1918 C

A newly mounted skeleton of the armored dinosaur *Stegosaurus stenops*, in the United States National Museum.

Proc. U. S. Nat. Mus., LIV, 383-390, pls. lvii-lxiii.

Abstract in Amer. Jour. Sci. (4), XLVII, 237-238; Neues Jahrb. Min. Geol. Pal., 1922. I, Ref., 255.

—— 1919 A

A new restoration of *Triceratops*, with notes on the osteology of the genus.

Proc. U. S. Nat. Mus., LV, 97-112, pls. iii-ix, 6 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 256; Sci. Progress, XIV, 241.

Review in Rev. crit. Paléozool., XXVII, 11 (title and date of publication incorrectly given).

—— 1919 B

Dimetrodon gigas, a giant spiny lizard from Texas bone beds.

Scient. Amer. Suppl., LXXXVIII (No. 2271), 20-21, 3 figs.

—— 1919 C

New fossil turtles, with notes on two described species.

Proc. U. S. Nat. Mus., LVI, 113-132, pls. xxix-xxxvii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 386; Rev. Geol. et Sci. con., IV, 1923, 92-93.

Review in Rev. crit. Paléozool., XXVII, 10.

Gilmore, C. W.—Continued 1919 D

A mounted skeleton of *Dimetrodon gigas* in the United States National Museum with notes on the skeletal anatomy.

Proc. U. S. Nat. Mus., LVI, 525-539, pls. lxx-lxxiii, 8 text-figs.

Abstracts in Rev. crit. Paléozool., Paris, XXIV, 147-148; XXVII, 209; Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 361-362; Nature, CV, 118, fig. 1.

—— 1919 E

An ornithomimid dinosaur in the Potomac of Maryland.

Science (n.s.), L, 394-395.

—— 1920 A

Reptilian faunas of the Torrejon, Puerco, and underlying Upper Cretaceous formations of San Juan County, New Mexico.

U. S. Geol. Surv. Profess. Pap., CXIX, 1-68, 71, with pls. i-xxvi and 33 text-figs.

The imprint gives the year 1919, but the paper was issued April 20, 1920.

Abstract in Nature, CVIII, 482.

—— 1920 B

Osteology of the carnivorous Dinosauria in the United States National Museum, with special reference to the genera *Antrodemus* (*Allosaurus*) and *Ceratosaurus*.

Bull. U. S. Nat. Mus., CX, 1-154, 36 pls., 78 text-figs.

The bibliography comprises 57 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 253-255; Sci. Progress, XVI, 215.

—— 1920 C

Reptile reconstructions in the United States National Museum.

Rep. Smithson. Instn. for 1917 (1920), 271-280, pls. i-vi.

Abstracts in Geol. Zentralbl., XXVII, 363; XXVIII, 345; Nature, XCVII, 386.

—— 1921 A

A new horned dinosaur from Canada. The *Styracosaurus albertensis* with a six-foot skull bristling with horns.

Scient. Amer. Monthly, III, 7-8, 3 figs.

Abstract in Rev. crit. Paléozool., XXVII, 210.

—— 1921 B

An extinct sea-lizard from western Kansas.

Scient. Amer., CXXIV, 273, 280, 3 figs.

Abstract in Rev. crit. Paléozool., XXVII, 209.

Gilmore, C. W.—Continued 1921 C

Fossil footprints of Texas.

Scient. Ameri., CXXIV, 333, 340, 4 figs. An unsigned article.

—— 1921 D

Discovery of sauropod dinosaur remains in the Upper Cretaceous of New Mexico.

Science (n.s.), LIV, 274.

Abstract in Rev. crit. Paléozool., XXVII, 209.

—— 1921 E

The fauna of the Arundel formation of Maryland.

Proc. U. S. Nat. Mus., LIX, 581-594, pls. CX-CXIV.

Abstracts in Rev. crit. Paléozool., XXVI, 5; XXVII, 209.

—— 1921 F

Remarks on some additions to the fossil vertebrate collection in the National Museum.

Jour. Wash. Acad. Sci., II, 66.

—— 1922 A

A new sauropod dinosaur from the Ojo Alamo formation of New Mexico.

Smithson. Misc. Coll., LXXII, No. 14, 1-9, 2 pls.

Review in Rev. crit. Paléozool., XXVII, 209.

Abstract in Geol. Zentralbl., XXVIII, 345.

—— 1922 B

The smallest known horned dinosaur *Brachyceratops*.

Proc. U. S. Nat. Mus., LXI, art. 3, 1-4, pls. 1-4.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 93-94; V, 126; in Rev. crit. Paléozool., XXVII, 11; XXVIII, 21.

—— 1922 C

The horned dinosaurs.

Rep. Smithson. Instn. for 1920, 381-387, pls. i-viii.

Abstract in Rev. crit. Paléozool., XXVII, 210.

—— 1922 D

A new description of *Saniwa ensidens* Leidy, an extinct varanid lizard from Wyoming.

Proc. U. S. Nat. Mus., LX, art. XXIII, 1-28, pls. i-iii, 22 text-figs.

Abstract in Rev. Géol. et Sci. conn., V, 127-128.

Review in Rev. crit. Paléozool., XXVII, 208; XXVIII, 22.

—— 1922 E

Note on dinosaur tracks in Texas.

Jour. Geol. XXX, 360.

Gilmore, C. W.—Continued 1923 A

A new fossil turtle, *Kinosternon arizonense*, from Arizona.

Proc. U. S. Nat. Mus., LXII, art. 5, 1-8, pls. 1-5, 7 text-figs. Issued Feb. 6, 1923.

Abstract in Rev. crit. Paléozool., XXVII, 217.

—— 1923 B

A new species of *Corythosaurus*, with notes on other Belly River Dinosauria.

Canad. Field-Naturalist, XXXVII, 46-52.

Abstract in Rev. crit. Paléozool., XXVII, 217.

—— 1923 C

Giant reptile taken to the capital.

Science (n.s.), LVIII, XII (Sept. 7).

—— 1923 D

A new species of *Aspideretes* from the Belly River Cretaceous of Alberta.

Trans. Roy. Soc. Canada (3), XVII, sec. iv, 1-10, pls. i-v.

—— 1924 A

Notes on Charles M. Sternberg's paper on Lance formation of southern Saskatchewan. (Sternberg, C. M., 1924 A.)

Canad. Field-Naturalist, XXXIII, 68-69.

—— 1924 B

A new cœlurid dinosaur from the Belly River Cretaceous of Alberta.

Can. Geol. Surv. Dept. Mines, Bull. XXXVIII (Geol. Ser. XLIII), 1-12, pl. i, text-figs. 1-5.

—— 1924 C

A new species of hadrosaurian dinosaur from the Edmonton formation (Cretaceous) of Alberta.

Can. Geol. Surv. Dept. Mines, Bull. XXXVIII (Geol. ser. XLIII), 13-26, pls. ii-v; text-figs. 6, 7.

—— 1924 D

Report on a collection of vertebrates from Wood Mountain, southern Saskatchewan.

Can. Geol. Surv. Dept. Mines, Bull. XXXVIII (Geol. ser. XLIII), 27-28.

—— 1924 E

On the genus *Stephanosaurus*, with a description of the type specimen of *Lambeosaurus lambei* Parks.

Can. Geol. Surv. Dept. Mines, Bull. XXXVIII, 29-48, pls. vi-x, text-figs. 8-12.

Gilmore, C. W.—Continued 1924 F

On the skull and skeleton of *Hypacrosaurus*, a helmet-crested dinosaur from the Edmonton Cretaceous of Alberta.

Can. Geol. Surv. Dept. Mines, Bull. XXXVIII, 49-64, pls. xi, xii, text-figs. 13-17.

—— 1924 G

On *Troodon validus;* an orthopodous dinosaur from the Belly River Cretaceous of Alberta, Canada.

Bull. Univ. Alberta, Dept. Geol., I, 1-43, pls. i-xv, 3 text-figs.

Note on in Amer. Jour. Sci. (5), VII, 510.

Abstracts in Amer. Jour. Sci. (5), VII, 510; Geol. Zentralbl., XXXI, 415.

—— 1924 H

A new species of *Laosaurus*, an ornithischian dinosaur from the Cretaceous of Alberta.

Trans. Roy. Soc. Canada (3), XVIII, 1-7, pls. i, ii.

—— 1924 I

The Dinosaur National Monument and its fossils.

Wash. Acad. Sci., XIV, 381 (abstract).

—— 1924 J

Expedition to the Dinosaur National Monument, Utah.

Smithson. Misc. Coll., LXXVI, 12-16, figs. 16-21.

—— 1924 K

Collecting fossil footprints in Virginia.

Smithson. Misc. Coll., LXXVI, 16-18, 2 figs.

—— 1925 A

A nearly complete articulated skeleton of *Camarasaurus*, a saurischian dinosaur from the Dinosaur National Monument, Utah.

Mem. Carnegie Mus., X, 347-384, pls. xiii-xvii, text-figs. 1-5.

—— 1925 B

Osteology of ornithopodous dinosaurs from the Dinosaur National Monument, Utah. *Camptosaurus medius, Dryosaurus altus, Laosaurus gracilis.*

Mem. Carnegie Mus., X, 385-409, pl. xviii, text-figs. 1-8.

—— 1926 A

Fossil footprints from the Grand Canyon.

Smithson. Misc. Coll., LXXVII, No. 9, 1-41, 12 pls., 22 text-figs.

Abstract in Petermann's Geogr, Mitteil. 1927, Heft 1, 2, 54.

Gilmore, C. W.—Continued 1926 B

A new aëtosaurian reptile from the Morrison formation of Utah.

Ann. Carnegie Mus., XVI, 325-342, pls. xxvii-xxix, 4 text-figs.

There is appended a bibliography of 17 titles.

—— 1926 C

Prehistoric footprints from the Grand Canyon.

Science (n.s.), LXIII, May 21, xvi.

—— 1926 D

Footprints in the rocks of ages.

Nature Mag., VII, 362-364, 5 figs.

—— 1926 E

Diplodocus, an amphibious dinosaur.

Nature Mag., VIII, 35, 1 fig.

—— 1926 F

Ceratosaurus, a flesh-eating dinosaur.

Nature Mag., VIII, 91, 1 fig.

—— 1926 G

Fossil footprints from the Grand Canyon.

Bull. Geol. Soc. Amer., XXXVII, 240-241 (abstract).

—— 1926 H

Brachyceratops, the smallest American horned dinosaur.

Nature Mag., VIII, 163, 1 fig.

—— 1926 I

Thescelosaurus; a bird-footed dinosaur.

Nature Mag., VIII, 280, 1 fig.

—— 1926 J

Identification of fossils from Lance formation, Wyoming.

U. S. Geol. Surv. Profess. Pap., CXLV, 28.

—— 1926 K

On a nearly complete lizard skull from the Oligocene of Nebraska.

Univ. Kan. Sci. Bull., XVI, 229-232, pl. xv.

—— 1926 L

Description of mosasaurians from the Ripley formation, Tennessee.

U. S. Geol. Surv. Profess. Pap., CXXXVII, 191-192, pl. lxii, figs. 5, 8; pls. lxxi, lxxii.

—— 1926 M

Stegosaurus, an armored dinosaur.

Nature Mag., VIII, 348-349, fig.

—— 1927 A

Trachodon, the duck-billed dinosaur.

Nature Mag., IX, 35, fig.

Issued late in Dec. 1926.

Gilmore, C. W.—Continued 1927 B
Ossified tendons found in dinosaurs.
Ann. Med. Hist., IX, 94-97, figs. 1, 2.

—— 1927 C
Collecting fossil footprints in the Grand Canyon, Arizona.
Smithson. Misc. Coll., LXXVIII, art. 7, 45-48, figs. 52, 53.

—— 1927 D
Fossil footprints from the Grand Canyon: second contribution.
Smithson. Misc. Coll., LX, art. 3, 1-78, 21 pls., 37 text-figs.
The bibliography presents 31 titles.

—— 1927 E
On fossil turtles from the Pleistocene of Florida.
Proc. U. S. Nat. Mus., LXXI, art 15, 1-10, pls. i-v, text-figs. 1-4.

—— 1927 F
Fossil footprints in the Grand Canyon.
Jour. Wash. Acad. Sci., XVII, 272.

—— 1927 G
The fossil lizards of North America.
Mem. Nat. Acad. Sci., XXII, 1-198, 27 pls., 106 figs.
The bibliography occupies pages 165-169.

—— 1927 H
Note on a second occurrence of the mosasaurian reptile *Globidens*.
Science (n.s.), LXVI, 452.

—— 1927 I
Triceratops, a horned dinosaur.
Nature Mag., IX, 393, fig.

—— 1928 A
Fossil footprints from the Grand Canyon: Third Contribution.
Smithson. Misc. Coll., LXXX, art. 8, 1-16, pls. i-v, 7 text-figs.

—— See also **Peterson** and **Gilmore.**

Girard, Charles F. 1851 A
A monograph of the cottoids.
Smithson. Contrib. Knowl., III, art. 3, 1-80, pls. i-iii.
The osteology is discussed on pages 14-26 and illustrated in plate iii.

—— 1851 B
On the genus *Cottus* auct.
Proc. Bost. Soc. Nat. Hist., III, 183-190.

—— 1852 A
Révision du genre *Cottus* des auteurs.
Nouv. Mém. Soc. Helvét. Sci. Nat., XII, art. 3, 1-28.

Girtanner, A. 1901 A
Der Moschusochse (*Ovibos moschatus* Zimm.).
Ber. St. Gall. naturw. Ges., 1899-1900, 120-146, plate.
Abstract in Geol. Centralbl., II, 574.

Goddard, Malcolm 1907 A
Fish remains from the marine Lower Triassic of Aspen Ridge, Idaho.
Bull. Dept. Geol., Univ. Calif., V, 145-148, 5 figs.
Abstracts in Geol. Centralbl., XII, 227; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 446; Rev. crit. Paléozool., XI, 228.

Goddard, Pliny E. 1926 A
The antiquity of man in America.
Nat. Hist., XXVI, 257-259.

—— 1927 A
Man in America.
Amer. Mercury, X, 67-70.

Godman, John D. 1860 A
American natural history.
8vo., ed. 3, I, i-xxvi+iii-xiii+15-345; II, 1-337. Many illustrations.
The first edtion appears to have been published in 1826; the second, in 1846. The author treated only the Mammalia. No citations to Godman's book are here made, except in the case of a few extinct species.

Goeppert, E. 1896 B
Die Phylogenese der Wirbelthierkralle.
Morphol. Jahrb., XXV, 1-30, pl. i, 19 text-figs.
There are 7 titles in the bibliography.

—— 1897 A
Bemerkungen zur Auffassung der Morphologie der Rippen in Rabl's "Theorie des Mesoderms."
Morphol. Jahrb., XXV, 244-249.

—— 1905 A
Bemerkungen zu: A. Fleischmann, Das Kopfskelett der Amnioten.
Morphol. Jahrb., XXXIII, 532-534.

Goethe, J. W., and Ed. Alton 1824 A
Zur vergleichenden Osteologie, von Goethe; mit Bemerkungen von Dr. Ed. d'Alton.
Nova Acta Acad. Leop. Carol., XII, 325-332, pls. xxxiii-xxxv.

Goetsch, Wilhelm 1915 A
Über Hautknochenbildung bei Teleostiern und bei *Amia calva*.
Arch. mikr. Anat. Bonn., LXXXVI, 435-468, pls. xviii, xix, 3 text-figs.
The bibliography contains 86 titles.

Goetsch, Wilhelm—Continued 1920 A
Hautknochenbildungen bei Fischen.
Zool. Jahrb. Anat., XLII, 1-42, pls. i, ii; 435-528, pls. xix-xxiii.
34 titles are recorded in the bibliographies.

Goette, A. 1878 A
Zur Morphologie des Wirbelsystems.
Zool. Anz., I, 11-12.

—— 1879 A
Beiträge zur vergleichenden Morphologie des Skeletsystems der Wirbelthiere. II: Die Wirbelsäule und ihre Anhänge.
Arch. mikr. Anat. Bonn., XVII, 117-152, pls. vii-ix.
The bibliography comprises 24 titles.

—— 1895 A
Ueber den Ursprung der Wirbelthiere.
Verh. deutsch. Zool. Ges., 1895, v, 12-29, 7 figs.

—— 1901 A
Über die Kiemen der Fische.
Zeitschr, wiss. Zool., LXIX, 533-577, pls. xl-xliii.

Goldby, F. 1925 A
The development of the columella auris.
Jour. Anat. Lond., LIX, 301-325, 10 figs.
The bibliography presents 10 titles.

Goldfuss, Georg August 1831 A
Beiträge zur Kenntnis verschiedener Reptilien der Vorwelt.
Nova Acta Acad. Leop. Carol., XV, 61-128, pls. vii-xiii.
Describes species of *Pterodactylus, Ornithocephalus, Lacerta, Rana, Salamandra, Triton* and *Ophis.*

—— 1847 B
Über das älteste der mit Bestimmtheit erkannten Reptilien, einen Krokodilier, und einige neue fossile Fische aus der Steinkohlen-Formation.
Neues Jahrb. Min. Geogn. Geol., 1847, 400-404, pl. vi.

Goldman, Edward Alphonso 1910 A
Revision of the wood rats of the genus *Neotoma.*
N. A. Fauna No. XXXI, 1-124, pls. i-viii, 14 text-figs.

—— 1911 A
Revision of the spiny pocket mice (Genera *Heteromys* and *Liomys*).
N. A. Fauna, No. XXXIV, 1-70, pls. i-iii, 6 text-figs.

Goldman, E. A.—Continued 1913 A
A new generic name for the Asiatic tapir.
Proc. Biol. Soc. Wash., XXVI, 65-66.

—— 1918 A
The rice rats of North America (Genus *Oryzomys*).
N. A. Fauna, No. XLIII, 1-100, pls. i-vi, 11 text-figs.

Goode, G. B., and T. H. **Bean** 1895 A
Oceanic ichthyology, a treatise on the deep-sea and pelagic fishes of the world.
Special Bull. U. S. Nat. Mus., 4to., i-xxv+1-26, 1-553, atlas of plates, i-cxxiii.

Goodey, T. 1910 A
A contribution to the skeletal anatomy of the frilled shark, *Chlamydoselachus anguineus* Gar.
Proc. Zool. Soc. Lond., 1910, 540-570, pls. xlii-xlvi.

Goodman, Neville 1868 A
Note on a three-toed cow.
Jour. Anat. Physiol. Lond., II, 109-113.

Goodrich, Edwin S. 1901 A
On the pelvic girdle and fin of *Eusthenopteron.*
Quart. Jour. Micr. Sci. (n.s.), XLV, 311-324, pl. xvi, 12 text-figs.
Abstracts in Neues Jahrb. Minn. Geol. Pal., 1905, II, Ref., 311-312, figs. 1, 2; Geol. Centralbl., II, 604.

—— 1904 A
On the dermal fin-rays of fishes—living and extinct.
Quart. Jour. Micr. Sci., XLVII, 465-522, pls 35-41.
There is furnished a bibliography of 43 titles.
Abstract in Jour. Roy. Micr. Sci., 1904, 519-520.

—— 1906 A
Notes on the development, structure, and origin of the median and paired fins of fish.
Quart. Jour. Micr. Sci., L, 333-376, pls. x-xiv, 3 text-figs.
There is a bibliography of 37 titles.
Abstract in Nature, London, LXXIV, 252; Knowl. and Scient. News (n.s.), III, 510; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 113; Sci. Progress, I, 463.

—— 1908 A
On the scales of fish, living and extinct, and their importance in classification.
Proc. Zool. Soc. Lond., 1907, II, 751-774, pls. xliii-xlvi, text-figs. 196-204.
Abstracts in Geol. Centralbl., XII, 152; XIII, 439.

Goodrich, Edwin S.—Continued 1908 B
On the systematic position of *Polypterus.*
Rep. Brit. Assoc. Adv. Sci., LXXVII, Leicester, 1907, 545-546.

—— 1909 A
Vertebrata Craniata (1st fasc.: Cyclostomes and Fishes). Lankester's A Treatise on Zoology.
Pt. ix, i-xvi+1-518, 515 figs.
The biography records the titles of 574 books and articles.
Comment on in Ann. Mag. Nat. Hist. (8), IV, 308; Nature, LXXXII, 152.

—— 1910 A
Origin of vertebrates.
Proc. Linn. Soc. Lond., CXII, 24-26.

—— 1911 A
On the segmentation of the occipital region of the head in the Batrachia urodela.
Proc. Zool. Soc. Lond, 1911, 101-120, text-figs. 29-51.
There is a bibligraphy of 11 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 50.

—— 1913 A
On the structure of bone in fishes: a contribution to palæohistology.
Proc. Zool. Soc. Lond., 1913, 80-85, text-figs. 13-16.

—— 1916 A
On the classification of the Reptilia.
Proc. Roy. Soc. Lond., LXXXIX, 261-276, 5 figs.
There is a biblography of 37 titles.

—— 1918 A
On the development of the segments of the head in *Scyllium.*
Quart. Jour. Micr. Sci. (n.s.), LXIII, 1-30, 2 pls., 1 text-fig.
The bibliography presents 28 titles.

—— 1919 A
Restoration of the head of *Osteolepis.*
Jour. Linn. Soc. Zool., XXXIV, 181-188, 6 figs.
The bibliography presents 15 titles.

—— 1922 A
On a new type of teleostean cartilaginous pectoral girdle found in young clupeids.
Jour. Linn. Soc. Zool., XXXIV, 505-509, 6 figs.
There is a bibliography of 10 titles.

Goodrich, Edwin S.—Continued 1924 A
The origin of land vertebrates.
Nature, CXIV, 935-936, 1 fig.
Abstract in Neues Jahrb. Minn. Geol. Pal., 1925, 286.
See also Rep. Brit. Assoc. Adv. Sci., Toronto, 1924.

Goodsir, J. 1857 A
On the morphological constitution of the vertebrate head.
Edinb. New Philos. Jour., V, 123-178.
Also in his "Anatomical Memoirs," II, 1868, 88-197.

—— 1857 B
On the morphological constitution of limbs.
Edinb. New Philos. Jour., V, 178-181.
Also in his "Anatomical Memoirs," II, 1868, 198-203.

—— 1868 A
On the follicular stage of dentition in the ruminants, with some remarks on that process in the other orders of Mammalia.
Anatomical Memoirs, II, 53-55.
Said to be extracted from Trans. Brit. Assoc. Adv. Sci., Aug. 1893; evident error.

Goodyear, Watson A. 1890 A
Remarks on elephant remains found on Santa Rosa Island.
Rep. Calif. State Min. Bur., for 1889, 169.

Gordon, Charles Henry 1913 A
Geology and underground waters of the Wichita region, north-central Texas.
U. S. Geol. Surv. Water-supp. Pap., CCCXVII, 1-88, 1 map, 1 plate.

Gordon, Reginald 1902 A
Bones of a mastodon found.
Science (n.s.), XVI, 594.
Brief abstract in Geol. Centralbl., IX, 486.

—— 1902 B
Tree trunks found with mastodon remains.
Science (n.s.), XVI, 1033.

Gorjanovič-Kramberger, D. 1891 A
Palæoichthyolozki prilozi. (Collectæ palæoichthyologicæ.)
Rad Jugoslav. Akad., CVI, 59-129, 8 pls.

Gorjanovič-Kramberger, Karl 1905 A
Die obertriadische Fischfauna von Hallein in Salzburg.
Beitr. Pal. Geol. Oesterr.-Ung., XVIII, 1905, 193-224, pls. xvii-xxi, 19 text-figs.

Gosselet, Jules A. A. 1875 A

Mâchoire de *Ptychodus latissimus.*

Ann. Soc. géol. Nord., 12, 121.

"M. Gosselet annonce la découverte à Condé d'une mâchoire à peu près complète de *Ptychodus latissimus* (42 dents)."

Gottlieb, Hedwig 1914 A

Die Antiklinie der Wirbelsäule der Säugetiere.

Morphol. Jahrb., XLIX, 179-220, pls. viii-xiii, 2 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, I, 261-265.

Gould, A. A. 1848 A

Fossil *Mallotus villosus.*

Proc. Bost. Soc. Nat. Hist., III, 64.

Gould, Charles Newton 1901 A

Notes on the fossils from the Kansas-Oklahoma Red-beds.

Jour. Geol., IX, 337-340.

Graham, James C. 1801 A

Further account of fossil bones in Orange and Ulster Counties (N. Y.).

Med. Reposit. N. Y., IV, 213-214.

Grandidier, G. 1912 A

Un nouvel exemple d'extinction de formes animales géantes voisines d'espèces actuelles.

C. R. Acad. Sci. Paris, CLIV, 399-401, 1 fig.

Granger, Walter 1908 A

A revision of the American Eocene horses.

Bull. Amer. Mus. Nat. Hist., XXIV, 221-264, pls. xv-xviii, 5 text-figs.

Abstracts in Geol. Centralbl., XIII, 394; Amer. Jour. Sci. (4), XXV, 528; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 163.

—— 1908 B

Studies on the American hyracotheres.

Science (n.s.), XXVII, 256.

—— 1909 A

Faunal horizons of the Washakie formation of southern Wyoming.

Bull. Amer. Mus. Nat. Hist., XXVI, 13-24, pls. ii-vi, 3 text-figs.

Abstract in Geol. Centralbl., XV, 308.

—— 1910 A

Tertiary faunal horizons in the Wind River Basin, Wyoming, with descriptions of new Eocene mammals.

Bull. Amer. Nat. Hist., XXVIII, 235-251, pls. xx-xxiii, 6 text-figs.

Reviewed in Amer. Jour. Sci. (4), XXXI, 151-152. Abstracts in Geol. Centralbl., XVI, 214; Sci. Progress., V, 664-670.

Granger, Walter—Continued 1911 A

Earliest known ancestor of the modern horse, the small four-toed *Eohippus,* discovered in the Bad-lands of Wyoming.

Amer. Mus. Jour., XI, 85-88, 5 figs.

—— 1914 A

On the names of Lower Eocene faunal horizons of Wyoming and New Mexico.

Bull. Amer. Mus. Nat. Hist., XXXIII, 201-207.

—— 1915 A

A revision of the Lower Eocene Wasatch and Wind River faunas. Part III: Order Condylarthra. Families Phenacodontidæ and Meniscotheriidæ.

Bull. Amer. Mus. Nat. Hist., XXXIV, 329-361, 18 text-figs.

Abstract in Rev. crit. Paléozool., XIX, 100.

—— 1915 B

New evidence of the affinities of the Multituberculata.

Bull. Geol. Soc. Amer., XXVI, 152. Abstract.

—— 1917 A

Notes on Paleocene and Lower Eocene mammal horizons of northern New Mexico and southern Colorado.

Bull. Amer. Mus. Nat. Hist., XXXVII, 821-830, pls. xcvii, xcviii, figs. 1, 2.

Abstract in Geol. Zentralbl., XXVII, 221.

—— 1918 A

New tillodont skull from the Huerfano Basin, Colorado.

Bull. Geol. Soc. Amer., XXIX, 147-148.

—— and W. K. **Gregory** 1917 A

A revision of the Eocene Primates of the genus *Notharctus.*

Bull. Amer. Mus. Nat. Hist. XXXVII, 841-859, pls. ciii-cvii.

Abstracts in Rev. crit. Paléozool., XXV, 8; Geol. Zentralbl., XXVII, 222.

—— 1923 A

Protoceratops andrewsi, a pre-ceratopsian dinosaur from Mongolia.

Amer. Mus. Novit., LXXII, 1-9, 4 figs.

—— See **Osborn** and **Granger; Matthew** and **Granger.**

Grant, E. 1842 A

On the structure and history of the mastodontoid animals of North America.

Proc. Geol. Soc. Lond., III, 770-771.

Also in Ann. Mag. Nat. Hist. (1), XI, 479-480. Abstract of a paper apparently never published.

Grant, Madison 1902 A
Moose.
Rep. Forest, Fish, Game Comm. N. Y., VII, 225-238, 8 ills.

—— 1903 A
The caribou.
Rep. N. Y. Zool. Soc., VII, 1902 (1903), 175-196, 33 illustrations.

—— 1904 A
Distribution of the moose.
G. B. Grinnell's "American Big Game and Its Haunts," 374-390. Republished from Rep. Forest, Fish and Game Comm. N. Y., VII, 1902 (1903).

—— 1904 B
The origin and relationship of the large mammals of North America.
Rep. N. Y. Zool. Soc., VIII, 1903 (1904), 182-207.
Reviewed in Amer. Jour. Sci. (4), XVIII, 161.

—— 1905 A
The Rocky Mountain goat.
Rep. N. Y. Zool. Soc., IX, 1904 (1905), 231-261, 18 illustrations.

Grant, R. E. 1833 A
On the cranium of the round-headed grampus (*Delphinus globiceps* Cuv.).
Proc. Zool. Soc. Lond., I, 65-66.

Grant, U. S. 1899 A
The geology of Itasca County.
Final Rep. Geol. Surv. Minn., IV, 166-211, maps.

Gratacap, L. P. 1902 A
The great Jurassic dinosaur.
Scient. Amer., LXXXVI, 5, 3 text-figs.
Abstract in Geol. Centralbl., IX, 487.

—— 1908 A
[On turtles described by O. P. Hay.]
Science (n.s.), XXVII, 921-922.

Grateloup, J. P. S. 1840 B
Considérations générales sur la géologie et la zoologie fossile de la commune de Léognan, près Bordeaux.
Act. Soc. Linn. Bordeaux, XI, 335-346.

Gratzianow, Valerian 1900 A
Über die sog, "Kauplatte" der Cyprinoiden.
Zool. Anz., XXIII, 66-73, 5 text-figs.

Graul, W. 1907 A
Zur Entwicklung von *Vanellus cristatus.*
Arch. Naturges., LXXIII, Bd. 1, 154-180, pls. vi. vii.
There is a bibliography of 34 titles.

Graves, Robert J. 1831 A
An account of a peculiarity not hitherto described in the ankle, or hock-joint, of the horse; with remarks on the structure of the vertebræ of a whale, entitled *Delphinus diodon.*
Trans. Roy. Irish Acad., XVI, pt. II, Sci., 85-91.
Reprinted in Edin. Jour. Sci. (n.s), IV, 1831, 47-52; Edin. New Philos. Jour., X, 1831, 59-64.

Gray, David 1883 A
Notes on the characters and habits of the bottlenose whale (*Hyperoodon rostratus*).
Proc. Zool. Soc. Lond. for 1882, 726-831, 8 figs.

Gray, George R. 1840 A
A list of the genera of birds.
8vo., London, i-viii+i-ii+1-80 pages.

Gray, J. E. 1821 A
On the natural arrangement of vertebrose animals.
Lond. Med. Reposit. XV, 296-310.
Cited as issued in 1822.

—— 1825 A
A synopsis of the genera of reptiles and Amphibia, with a description of some new species.
Ann. Philos., Lond., XXVI, (n.s., X), 193-217.

—— 1825 B
An outline of an attempt at the disposition of Mammalia into tribes and families with a list of the genera apparently appertaining to each tribe.
Ann. Philos. Lond., XXVI, 337-344.

—— 1837 B
Revision of the genus *Sorex* Linn.
Proc. Zool. Soc. Lond., V, 123-126.

—— 1837 C
General arrangement of the Reptilia.
Proc. Zool. Soc. Lond., V, 131-132.

—— 1837 D
Revised arrangement of the ophidians.
Proc. Zool. Soc. Lond., V, 135.

—— 1844 A
The seals of the southern hemisphere.
Zool. *Erebus* and *Terror.* Pts. I, II, Mamm., 1-8, pls. iii-xvii.

—— 1846 A
On the cetaceous animals.
Zool. *Erebus* and *Terror.* Pts. III-V, 13-53, pls. i-xxx.

Gray, J. E.—Continued 1846 B
On the British Cetacea.
Ann. Mag. Nat. Hist. (1), XVII, 82-85.

—— 1850 A
Catalogue of the specimens of Amphibia in the collection of the British Museum.
Pt. II: Batrachia gradientia, etc., 1-72.

—— 1855 A
Catalogue of shield reptiles in the collection of the British Museum.
Part I: Testudinata (tortoises), 4to., London, 1-82, pls. i-xlii.

—— 1863 A
On the arrangement of the cetaceans.
Proc. Zool. Soc. Lond., 1863, 197-202.

—— 1866 B
Notes on the skulls of the sea-bears and sea-lions.
Ann. Mag. Nat. Hist. (3), XVIII, 228-237.

—— 1866 C
Notes on the pronghorn buck (*Antilocapra*) and its position in the system.
Ann. Mag. Nat. Hist. (3), XVIII, 323-326, 468-469.

—— 1867 C
Synopsis of the species of recent crocodilians or emydosaurians, chiefly founded on the specimens in the British Museum and the Royal College of Surgeons.
Trans. Zool. Soc. Lond., VI, 125-169, pls. xxxi-xxxiv, 18 text-figs.

—— 1867 D
Notes on the skulls of the hares (Leporidæ) and picas (Lagomyidæ) in the British Museum.
Ann. Mag. Nat. Hist. (3), 219-225.

—— 1867 E
Notes on the skulls of the cats (Felidæ).
Proc. Zool. Soc. Lond., 1867, 258-277, 7 figs.

—— 1868 C
On the geographical distribution of the Balænidæ, or right whales.
Ann. Mag. Nat. Hist. (4), I, 242-247.

—— 1869 D
Additional notes on sea-bears (Otariadæ).
Ann. Mag. Nat. Hist. (4), IV, 264-270.

Gray, J. E.—Continued 1869 E
Note on seals (Phocidæ) and the changes in the form of their lower jaw during growth.
Ann. Mag. Nat. Hist. (4), IV, 342-346.

—— 1870 A
Observations on the whales described in the "Ostéographie des cétacés" of MM. Van Beneden and Gervais.
Ann. Mag. Nat. Hist. (4), VI, 193-204.

—— 1870 B
The geographical distribution of the Cetacea.
Ann. Mag. Nat. Hist. (4), VI, 387-394.

—— 1872 B
Catalogue of shield reptiles in the collection of the British Museum. Pt. II: Emydosaurians, Rhynchocephalia, and amphisbaenians.
4to., London, i-vi+1-41 pages, 24 figs.

—— 1873 D
On the original form, development and cohesion of the bones of the sternum of chelonians; with notes on the skeleton of *Sphargis*.
Ann. Mag. Nat. Hist. (4). XI, 161-172, pls. iv-vi.

—— 1873 E
Notes on the family Chelydradæ.
Ann. Mag. Nat. Hist. (4), XII, 66-70.

—— 1873 F
Additional notes on the form of the bones in the sternum of very young tortoises, and their development.
Ann. Mag. Nat. Hist. (4), XII, 319-323, pl. xii.

—— 1874 A
On the skulls of sea-bears and sea-lions (Otariadæ).
Ann. Mag. Nat. Hist. (4), XIV, 24-30.

Green, Caleb 1854 A
[Letter accompanying cast of tooth of mastodon found at Homer, N. Y.]
Rep. State Cab. N. Y., VII, 16.

Green, John 1857 A
Epidermis from the border of the mouth of *Pristis sagitta*.
Proc. Bost. Soc. Nat. Hist., VI, 67.

—— 1858 A
Chemical constitution of scales of fishes.
Proc. Bost. Soc. Nat. Hist., VI, 362-363.

—— 1862 A
Structure of scales of *Amia*.
Proc. Bost. Soc. Nat. Hist., VIII, 218.

Green, Wyman R. 1913 A
A description of the specimens of the teleostean genus *Enchodus,* in the University of Kansas museum.
Kansas Univ. Sci. Bull., VII, 71-107, pls i-xvii.
Abstract in Rev. crit. Paléozool., XIX, 49; Geol. Zentralbl., XXI, 266.

Greene, Francis V. 1853 A
Chemical investigations on remains of fossil Mammalia.
Proc. Acad. Nat. Sci. Phila., v, 292-298.
Reprinted in Amer. Jour. Sci., XVI, 1853, 16-20.

Greene, George K. 1881 A
Geology of Monroe County [Indiana].
Rep. Bur. Stat. Geol. Ind., for 1879-1880, 57-81.

Greene, J. Reay 1861 A
On the mutual relations of the cold-blooded vertebrates.
Jour. Linn. Soc., Zool, v, 218-228.

Gregorio, A. See **De Gregorio,** A.

Gregory, Herbert E. 1917 A
Geology of the Navajo country. A reconnaissance of parts of Arizona, New Mexico, and Utah.
U. S. Geol. Surv. Profess. Pap., XCIII, 1-161, pls. i-xxxiv, 3 text-figs.

Gregory, J. W. 1895 A
Contributions to the palæontology and physical geology of the West Indies.
Quart. Jour. Geol. Soc., LI, 255-312, pl. xi.

Gregory, W. K. 1901 A
Extracts from the reports of field parties sent by the department of vertebrate palæontology in search of fossil mammals and reptiles, 1900.
Amer. Mus. Jour., I, 140-145, 3 figs.

—— 1903 A
Adaptive significance of the shortening of the elephant's skull.
Bull. Amer. Mus. Nat. Hist., XIX, 387-394, pl. xxiii, text-figs. 1-4.
Abstract in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 471.

—— 1904 A
The relations of the anterior visceral arches to the chondrocranium.
Biol. Bull., VII, 55-69, pl. i.

—— 1904 B
Anent gizzards.
Science (n.s.), XX, 888.

Gregory, W. K.—Continued 1905 A
The weight of the *Brontosaurus.*
Science (n.s.), XXII, 572.
Abstract in Sci. Progress, I, 457.

—— 1906 A
Department of vertebrate palæontology, explorations of 1905.
Amer. Mus. Jour., VI, 13-15.

—— 1907 A
The skeleton of the Columbian mammoth.
Amer. Mus. Jour., VII, 5-6.

—— 1907 B
The *Naosaurus,* or "ship-lizard."
Amer. Mus. Jour., VII, 36-41, 3 plates.

—— 1907 C
The Warren mastodon.
Amer. Mus. Jour., VII, 90-91, 1 plate.

—— 1907 D
The orders of teleostomous fishes. A preliminary review of the broader features of their evolution and taxonomy.
Ann. N. Y. Acad. Sci., XVII, 437-508, pls. xxix, xxx.

—— 1908 A
Exhibit illustrating the evolution of the horse.
Amer. Mus. Jour., VIII, 116-122, 5 plates.

—— 1910 A
The orders of mammals.
Bull. Amer. Mus. Nat. Hist., XXVII, 1-524, 32 text-figs.
Reviewed in Nature, LXXXIV, 216; Rev. crit. Paléozool., XV, 12-16; XXII, 46-50; Amer. Jour. Sci. (4), XXX, 88.
Abstracts in Winge, H., 1923 A, 184; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 50.

—— 1910 B
The *Tyrannosaurus.*
Amer. Mus. Jour., X, 2-8, 6 plates.

—— 1910 C
Genetic relations of the Insectivora to other orders of mammals.
Ann. N. Y. Acad. Sci., XIX, 297-299.

—— 1910 D
Application of the quadrate-incus theory to the conditions in theriodont reptiles and the genetic relations of the latter to the Mammalia.
Science (n.s.), XXXI, 600.

—— 1910 E
Notes on the insectivorous genus *Tupaia* and its allies.
Science (n.s.), XXXI, 918-919.

Gregory, W. K.—Continued 1911 A

The limbs of *Eryops* and the origin of paired limbs from fins.

Science (n.s.), xxxiii, 508-509.

See abstract in Ann. N. Y. Acad. Sci., xxi (1912), 192.

—— 1911 B

Further notes on the evolution of paired fins.

Science (n.s.), xxxiv, 892.

See abstract in Ann. N. Y. Acad. Sci., xxi (1912), 216, 219.

—— 1911 C

Application of the quadrate-incus theory to the conditions in theriodont reptiles and the genetic relations of the latter to the Mammalia.

Ann. N. Y. Acad. Sci., xx, 404-405 (abstract).

—— 1911 D

Notes on the insectivore genus *Tupaia* and its allies.

Ann. N. Y. Acad. Sci., xx, 419 (abstract).

—— 1912 A

Note on the Upper Eocene titanotheroid *Telmatherium* (?) *incisivum* Douglass from the Uinta basin.

Science (n.s.), xxxv, 546.

—— 1912 B

Note on the quantitative representation of the factors of evolution.

Jour. Acad. Nat. Sci. Phila. (2), xv, 307.

—— 1912 C

Symposium on ten years' progress in vertebrate paleontology. Marsupials, insectivores, and primates.

Bull. Geol. Soc. Amer., xxiii, 187-196.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

—— 1912 D

Notes on the origin of paired limbs of terrestrial vertebrates.

Ann. N. Y. Acad. Sci., xxi, 219-220 (abstract).

—— 1912 E

A new restoration of a titanothere.

Amer. Mus. Jour., xii, 15-17, 2 figs.

—— 1912 F

Notes on the principles of quadrupedal locomotion and on the mechanism of the limbs in hoofed animals.

Ann. N. Y. Acad. Sci., xxii, 267-294, figs. 1-7.

Abstract in Rev. crit. Paléozool., xx, 46.

Gregory, W. K.—Continued 1913 A

Relations of the Tupaiidæ and of Eocene lemurs, especially *Notharctus*.

Bull. Geol. Soc. Amer., xxiv, 117 (abstract).

Abstract in Geol. Zentralbl., xxi, 37.

—— 1913 B

Homology of the "lacrimal" and of the "alisphenoid" in recent and fossil reptiles.

Bull. Geol. Soc. Amer., xxiv, 241-246.

See also abstract, 118 of the same volume.

Abstract in Geol. Zentralbl., xxi, 39.

—— 1913 C

Relationship of the Tupaiidæ and of Eocene lemurs, especially *Notharctus*.

Bull. Geol. Soc. Amer., xxiv, 247-252.

—— 1913 D

Crossopterygian ancestry of the Amphibia.

Science (n.s.), xxxvii, 806-808.

—— 1913 E

Critique of recent work on the morphology of the vertebrate skull, especially in relation to the origin of mammals.

Jour. Morphol., xxiv, 1-42, 25 figs.

The bibliography presents titles of 40 books and papers.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xix, pt. 3, 62-64.

—— 1914 A

Skeleton of *Notharctus*, an Eocene lemuroid.

Bull. Geol. Soc. Amer., xxv, 141 (abstract).

—— 1914 B

Phyletic relationships of the Lemuroidea.

Bull. Geol. Soc. Amer., xxv, 141-142 (abstract).

—— 1914 C

Locomotive adaptations in fishes illustrating "habitus" and "heritage."

Ann. N. Y. Acad. Sci., xxii, 267-268.

—— 1914 D

Conference on convergent evolution.

Ann. N. Y. Acad. Sci., xxii, 293-295.

—— 1914 E

Convergence and allied phenomena in the Mammalia.

Rep. Brit. Assoc. Adv. Sci., lxxxiii, Birmingham, 1913, 525-526.

Gregory, W. K.—Continued 1914 F

Exhibition of a fossil skeleton of *Notharctus rostratus*, an American Eocene lemur, with remarks on the phylogeny of the Primates.

Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 529-530.

—— 1914 G

Note on auditory ossicles of rodents.

Bull. Amer. Mus. Nat. Hist., XXXVIII, 380.

—— 1915 A

I: On the relationship of the Eocene lemur *Notharctus* to the Adapidæ and to other Primates.

II: On the classification and phylogeny of the Lemuroidea.

Bull. Geol. Soc. Amer., XXVI, 419-446.

—— 1915 B

The base of the cranium in anthropoids and man.

Ann. N. Y. Acad. Sci., XXIV, 349-351.

—— 1915 C

An American Eocene lemur (*Notharctus* Leidy).

Ann. N. Y. Acad. Sci., XXIV, 383-384.

—— 1915 D

Present status of the problem of the origin of the Tetrapoda, with special reference to the skull and paired limbs.

Ann. N. Y. Acad. Sci., XXVI, 317-383, pl. iv, 15 text-figs.

—— 1915 E

Present status of the problem of the origin of birds.

Ann. N. Y. Acad. Sci., XXVI, 447-448.

—— 1916 A

Studies on the evolution of the Primates. Part I: The Cope-Osborn "Theory of tritubercuły" and the ancestral molar patterns of the Primates.

Bull. Amer. Mus. Nat. Hist., XXXV, 239-257, pl. i, 18 text-figs.

Abstract in Rev. crit. Paléozool., XXI, 9; L'Anthropologie, Paris, XXVIII, 1917, 157-159.

—— 1916 B

Studies on the evolution of the Primates. Part II: Phylogeny of recent and extinct anthropoids, with special reference to the origin of man.

Bull. Amer. Mus. Nat. Hist., XXXV, 258-355, 37 text-figs.

Abstract in Rev. crit. Paléozool., XXI, 9.

Gregory, W. K.—Continued 1916 C

Theories of the origin of birds.

Ann. N. Y. Acad. Sci., XXVII, 31-38.

Abstracts in Ann. N. Y. Acad. Sci., XXVI, 447; Rev. crit. Paléozool., XXI, 43.

—— 1916 D

Recent progress in vertebrate palæontology. Amphibians, reptiles.

Science (n.s.), XLIII, 105-107.

—— 1917 A

Evolution of the human face. Chief stages in its development from the lowest forms of life to man.

Amer. Mus. Jour., XVII, 377-388, 11 ills.

—— 1917 B

The coal measures Amphibia of North America.

Amer. Naturalist, LI, 311-320.

A review of Moodie, R. S., 1916 A.

—— 1917 C

Second report of the committee on the nomenclature of the cranial elements in the Permian Tetrapoda.

Bull. Geol. Soc. Amer., XXVIII, 973-975.

Followed by appendices presenting remarks by R. Broom, D. M. S. Watson and S. W. Williston.

—— 1917 D

Genetics *versus* paleontology.

Amer. Naturalist, LI, 622-635.

—— 1918 A

The evolution of orthodonty.

Dental Cosmos, May 1918.

Recorded here from reprint, 1-11.

—— 1919 A

The pelvis of dinosaurs; a study of the relations between muscular stresses and skeletal forms.

Copeia, No. 69, 18-20.

—— 1919 B

The evolution of the human face.

Nat. Hist., XIX, 421-425, 9 figs.

—— 1920 A

Studies in comparative myology and osteology: No. IV: A review of the evolution of the lacrymal bone of vertebrates with special reference to that of mammals.

Bull. Amer. Mus. Nat. Hist., XLII, 95-203, pl. xvi, 196 text-figs.

Pages 250-263 are occupied by the extensive bibliography.

Abstract in Sci. Progress, XVI, 213.

Discussed in Sefve, I. 1927 A, 72.

Gregory, W. K.—Continued 1920 B

Studies in comparative myology and osteology. No. V: On the anatomy of the pre-orbital fossæ of Equidæ and other ungulates.

Bull. Amer. Mus. Nat. Hist., XLII, 265-284, pl. xviii, 26 text-figs.

There is a bibliography of 15 titles.

Abstract in Sci. Progress, XVI, 214.

—— 1920 C

Restoration of *Camarasaurus* and life model.

Proc. Nat. Acad. Sci., VI, 16.

Abstract in Geol. Zentralbl., XXV, 540.

—— 1921 A

On the structure and relations of *Notharctus*, an American Eocene primate.

Mem. Amer. Mus. Nat. Hist. (n.s.), III, pt. ii, 49-243, pls. xxiii-lix, 84 text-figs.

The bibliography, 242-243, presents 62 titles.

—— 1921 B

Erwin S. Christman, 1885-1921. Draughtsman, artist, sculptor.

Nat. Hist., XXI, 620-625, 7 figs.

—— 1922 A

The origin and evolution of the human dentition.

Baltimore. Williams and Wilkins Co., i-xviii+1-548 pages, 15 pls., 353 text-figs.

The bibliography is found on pages 520-530.

Note on in Anat. Anz., LVI, 303.

This work was originally published in The Journal of Dental Research, as follows: In vol. II, 1920, 89-175, pls. i-iv; 215-282, pls. v-vii; 357-415, pls. viii-xiii; 607-717; in vol. III, 1921, 88-228, pls. xiv, xv.

—— 1923 A

A Jurassic fish fauna from western Cuba, with an arrangement of the families of holostean ganoid fishes.

Bull. Amer. Mus. Nat. Hist., XLVIII, 223-242, 6 figs.

—— 1923 B

A forerunner of the horned dinosaurs.

Nat. Hist., XXIII, 192.

—— 1924 A

A fossil ganoid fish (*Lepidotus? lacotanus*, new species) from the Lower Cretaceous of South Dakota.

Amer. Mus. Novit., No. CXXXIV, 1-8, 2 figs.

—— 1924 B

The gorilla's foot.

Nature, CXIII, 421-423; 457-458, 6 figs.

Gregory, W. K.—Continued 1925 A

A dissenting opinion.

Proc. Nat. Acad. Sci., XI, art. 12, 751.

In Osborn, H. F., 1925 C.

—— 1926 A

The skeleton of *Moschops capensis* Broom, a dinocephalian reptile from the Permian of South Africa.

Bull. Amer. Mus. Nat. Hist., LVI, 179-251, pls. i-xxi, 29 text-figs.

The bibliography comprises 32 titles.

—— 1926 B

Paleontology of the human dentition. Ten structural stages in the evolution of the cheek teeth.

Amer. Jour. Phys. Anthrop., IX, 401-426, 8 figs.

The bibliography includes 7 titles.

—— 1927 A

Two views of the origin of man.

Science (n.s.), LXV, 601-605.

—— 1927 B

Mongolia the new world.

Scient. Monthly, XXIV, 5-14, with figs.

—— 1927 C

The Mongolian life record.

Scient. Monthly, XXIV, 169-181, 10 figs.

—— 1927 D

Mongolian mammals of the "Age of Reptiles."

Scient. Monthly, XXIV, 225-235, 10 figs.

—— 1927 E

The Mongolian age of mammals.

Scient. Monthly, XXIV, 337-347, 9 figs.

—— 1927 F

Did man originate in central Asia?

Scient. Monthly, XXIV, 385-401, 8 figs.

—— 1927 G

The palæomorphology of the human head: Ten structural stages from fish to man. I: The skull in norma lateralis.

Quart. Rev. Biol., II, 267-279, 5 figs.

The bibliography comprises 30 titles.

—— 1927 H

Hesperopithecus apparently not an ape nor a man.

Science (n.s.), LXVI, 579-581.

—— 1927 I

How near is the relationship of man to the chimpanzee-gorilla stock?

Quart. Rev. Biol., II, 549-560, 9 figs.

—— 1928 A

A tour of the new fish hall.

Nat. Hist., XXVIII, 3-17, figs. 1-11.

Gregory, W. K., and L. A. **Adams** 1915 A

The temporal fossæ of vertebrates in relation to the jaw muscles.

Science (n.s.), XLI, 763-765.

—— and C. L. **Camp** 1918 A

Studies in comparative myology and osteology. No. III.

Bull. Amer. Mus. Nat. Hist., XXXVIII, 447-563, pls. xxxix-l.

Reviewed in Nat. Hist., XIX, 731-732.

—— and H. J. **Cook** 1926 A

New materials for the study of evolution: A series of primitive fossil rhinoceros skulls (*Trigonias*) from the Lower Eocene of Colorado.

Geol. Soc. Amer. Prelim. list, XXXIX, 59.

—— —— 1927 A

New material for the study of evolution: A series of primitive fossil rhinoceros skulls (*Trigonias*) from the Lower Oligocene of Colorado.

Bull. Geol. Soc. Amer., XXXVIII, 235.

—— and Milo **Hellman** 1923 A

Notes on the type of *Hesperopithecus haroldcookii* Osborn.

Amer. Mus. Novit., LIII, 1-16, 5 pages of figures.

Abstracts in Rev. crit. Paléozool., XXVII, 216; Neues Jahrb. Min. Geol. Pal., 1923, II, 290.

—— —— 1923 B

Further notes on the molars of *Hesperopithecus* and *Pithecanthropus*.

Bull. Amer. Mus. Nat. Hist., XLVIII, 509-530, 15 figs.

Abstract in Geol. Zentralbl., XXX, 253.

—— —— 1926 A

The dentition of *Dryopithecus* and the origin of man.

Anthrop. Pap. Amer. Mus. Nat. Hist., XXVIII, 1-123, pls. i-xxv, 32 text-figs.

The bibliography presents 88 titles.

——, and R. **Kellogg** 1927 A

A fossil porpoise from California.

Amer. Mus. Novit., CCLXIX, 1-7, 3 figs.

——, R. W. **Miner**, and G. K. **Noble** 1923 A

The carpus of *Eryops* and the structure of the primitive chiropterygium.

Bull. Amer. Mus. Nat. Hist., XLVIII, 279-288, 4 figs.

There is a bibliography of 12 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1924, I, 276; Geol. Zentralbl., XXX, 444; Nature, CXII, 806.

Gregory, W. K., and C. C. **Mook** 1925 A

On *Protoceratops*, a primitive ceratopsian dinosaur from the Lower Cretaceous of Mongolia.

Amer. Mus. Novit., CLVI, 1-9, 3 figs.

The bibliography comprises 27 titles.

——, and G. K. **Noble** 1924 A

The origin of the mammalian alisphenoid bone.

Jour. Morph., XXXIX, 435-461, pl. i, 13 text-figs.

The bibliography presents 33 titles.

——, and G. G. **Simpson** 1920 A

Cretaceous mammal skulls from Mongolia.

Amer. Mus. Novit., CCXXV, 1-20, 19 figs.

—— See **Berry**, E. W., and W. K. **Gregory** 1906 A

—— See also **Granger** and **Gregory**.

Grevé, Carl 1891 A

Die geographische Verbreitung der Hyaeniden und Caniden.

Zool. Jahrb. Syst., V, 400-424.

There is appended a list of 41 works on the subject.

—— 1900 A

Die geographische Verteilung der Wildschafe.

Korres.-Bl. Ver. Riga, XLIII, 131-145.

—— 1901 A

Die Verbreitung von *Ovibos moschatus* Blainv. einst und jetzt.

Sitz.-Ber., naturf. Ges. Dorpat, XII (1900), 371-374.

—— 1902 A

Die fossilen und recenten Edentaten und deren Verbreitung.

Sitz.-Ber. naturf. Ges. Dorpat., XIII, 77-107.

Abstracts in Geol. Centralbl., V, 376; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 183.

—— 1905 A

Was wir über Stellers Seekuh wissen.

Korres.-Bl. Ver. Riga, XLVIII, 145-156, 4 figs., a map.

There is a bibliography of 75 titles.

Grevé, Carl—Continued 1911 A

Schädel der Stellerschen Seekuh.

Korres.-Bl. Ver. Riga, LIV, 37, figure.

A figure is presented to illustrate Grevé's paper in volume XLVIII, 145-156, of the same journal.

Grier, N. M. See **Hitchcock** and **Grier**.

Grieve, Symington 1883 A

Notice of the discovery of remains of the great auk or garefowl (*Alca impennis*, L.) on the Island of Oronsay, Argyllshire.

Jour. Linn. Soc. Zool., XVI, 479-487, pl. ix.

Grinnell, George Bird 1904 A

The mountain sheep and its range.

Pages 270-348 in American Big Game and Its Haunts, by George Bird Grinnell.

—— 1923 A

An old-time bone hunt.

Nat. Hist., XXIII, 329-336, 2 figs.

An account of the expedition undertaken by Prof. O. C. Marsh in 1870 to the then Wild West, with pictures of the members of the party.

Grinnell, Hilda Wood 1918 A

A synopsis of the bats of California.

Univ. Calif. Publ. Zool., XVII, 223-404, pls. xiv-xxiv, 24 text-figs.

Pages 376-382 are the bibliography.

Grinnell, J. 1912 A

The bighorn of the Sierra Nevada.

Univ. Calif. Publ. Zool., X, 143-153, text-figs. i-iv.

Describes *Ovis cervina sierræ*, n. subsp.

Grobben, K. 1904 A

Ueber das Becken der Sirenen.

Verh. zool.-bot. Ges. Wien, LIV, 142-143.

Groghan, George 1831 A

Journal of voyage to explore the country adjacent to the Ohio River.

Monthly Amer. Jour. Geol., I, 257-272.

Voyage made in 1765 to Bigbone Lick, Kentucky.

Grote, Albert 1926 A

Über das knorpelige und knöcherne Nasenskelett eines *Siredon pisciformis*.

Morphol. Jahrb., LVI, 459-488, 6 figs.

In the bibliography are 28 titles.

Grote, Hermann 1902 A

Ueber die Functionen des Vogelschnabels.

Ornith. Monatsber., X, 59-63.

Gruber, Wenzel 1873 A

Ueber supernumeräre Knocken im Jochbogen.

Arch. Anat., Physiol., Med., 1873, 337-347, pl. vii.

Gudernatsch, J. F. 1909 A

Manatus latirostris Harl. Biologische und morphologische Beiträge.

Zool. Jahrb. Syst., XXVII, 225-236, pl. ix, 3 text-figs.

Gudger, E. W. 1907 A

A note on the hammerhead shark (*Sphyrna zygæna*) and its food.

Science (n.s.), XXV, 1005-1006.

—— 1910 A

The jaws of the spotted sting ray, *Aëtobatus narinari*.

Jour. Elisha Mitchell Sci. Soc., XXVI, 58-59.

See also Science (n.s.), XXXI, 917.

—— 1914 A

History of the spotted eagle ray, *Aëtobatus narinari*, together with a study of its external structures.

Publ. Carnegie Instn. Wash., No. 183, 243-323, 10 pls., 19 text-figs.

Appended is an extensive bibliography.

—— 1918 A

Sphyræna barracuda; its morphology, habits and history.

Publ. Carnegie Instn. Wash., No. 252, art. IV, 55-108, pls. i-vii, 5 text-figs.

The bibliography comprises 62 titles.

Günther, Albert C. 1847 A

Von dem Rumpfskelett des *Hydrarchus*.

In Carus, C. G., 1847 A, 9-12.

—— 1858 A

On the systematic arrangement of the tailless batrachians and the structure of *Rhinophrynus dorsalis*.

Proc. Zool. Soc. Lond., XXVI, 1858, 339-352.

—— 1876 A

Note on *Chrysochloris trevelyani*.

Ann. Mag. Nat. Hist. (4), XVII, 346-348.

—— 1887 A

Siluridæ.

Encyclop. Brit., 9th ed., XXII, 67-69, 5 text-figs.

—— 1898 A

On gigantic tortoises.

Proc. Linn. Soc. Lond., CX, 14-29.

Is accompanied by a list of 51 papers on the subject.

—— 1908 A

Agamidæ and Iguanidæ.

Ann. Mag. Nat. Hist. (8), II, 523-524.

Guérin, Raoul 1874 A

Études zoologiques et paléontologiques sur la famille des cétacés.

Paris, 1874, i-iii+1-145 pages, pls. i-iii.

Pages 135-145 are the bibliography.

Guernsey, J. A. 1831 A
Mastodon near Rochester, N. Y.
Amer. Jour. Sci. (i), XIX, 358-359, figure.

Guettard, —— 1752 A
Suite du mémoire dans lequel on compare le Canada à la Suisse, par rapport à ses minéraux.
Mém. Acad. Sci., France, 1752 (1756), 323-360, pls. viii-xii.

Guitel, Frédéric 1896 A
Recherches sur le développement des nageoires paires du *Cyclopterus lumpus* L.
Arch. Zool. Exper. (3), IV, 345-470, pls. vi-x, 9 text-figs.

Guldberg, Gustav 1894 A
Ueber temporäre äussere Hinterflossen bei Delphin-Embryonen.
Verh. Anat. Ges., VIII, 92-95.

—— 1903 A
Ueber die Wanderungen verschiedener Bartenwale.
Biol. Centralbl., XXIII, 803-816.

—— 1904 A
Ueber die Wanderungen verschiedener Bartenwale.
Biol. Centralbl., XXIV, 371-384, 391-396.
Continued from vol. XXIII, 816.
Appended is a bibliography of 48 titles.

Gulliver, George 1869 A
On certain nondescript bones in the skull of osseous fishes.
Ann. Mag. Nat. Hist. (4), IV, 397-398, 1 fig.

Gutberlet, John Earl 1915 A
On the osteology of some of the Loricati.
Ill. Biol. Monogr., II, No. 2, 1-30, pls. i-v.
There is a bibliography of 19 titles.

H. H. 1927 A
Pleistocene restorations.
Mus. Graphic, I, 165-167, 2 figs.

Haacke, Wilhelm 1886 A
Der Nordpol als Schöpfungszentrum der Landfauna.
Biol. Zentralbl., VI, 363-370.

Haeckel, Ernst 1868 A
Natürliche Schöpfungsgeschichte.
8vo., i-xvi+1-568 pages, with pls. and figs. First edition.

—— 1873 A
Natürliche Schöpfungsgeschichte.
8vo., Berlin, i-xlvi+1-688 pages, pls. i-xvi, 19 text-figs. Fourth edition.
Translation into English in two volumes, 1876, revised by E. Ray Lankester.

Haeckel, Ernst—Continued 1893 A
Systematische Einleitung: Zur Phylogenie der australischen Fauna.
Denk. med.-naturw. Ges. Jena, IV, i-xxiv.
Forms part of Semon's "Zool. Forschungsreisen."

—— 1908 A
Unsere Ahnenreihe (*Progonotaxis hominis*).
Festschr. 350-jahr. Jubelf. Thuring. Univ., 1-56, pls. i-vi.

Hagenbach, E. 1841 A
Ueber ein besonderes, mit dem Hammer der Säugethiere in Verbindung stehendes Knöchelchen.
Arch. Anat., Physiol., wiss. Med., 1841, 46-54, pl. iii.

Hager, Albert D. 1861 A
Fossil elephant. Fossil whale.
Report on the Geology of Vermont, 1861, 933-941. Also in Hager's Report of 1862 called Report on the economical geology, physical geography, and scenery of Vermont, 205-211.

Hagmann, Gottfried 1907 A
Über das Gebiss von *Cœlogenys* und *Dasyprocta* in seinen verschiedenen Stadien der Abkauung.
Zeitschr. Morphol. Anthrop., X, 464-480, pls. xxv, xxvi, 26 text-figs.

—— 1909 A
Über diluviale Murmeltiere aus dem Rheingebiet und ihre Beziehungen zu den lebenden Murmeltieren Europas.
Mitt. Geol. Landesanst., Elsass-Loth., VI, 369-460, pls. vii, viii, 1 table.
There is a bibliography of 19 titles.

Hague, Florence 1924 A
The chondrocranium of *Amia calva*.
Jour. Morph., XXXIX, 267-277, pls. i-iii.
The literature cited embraces 22 titles.

Hahn, Walter L. 1909 A
The mammals of Indiana.
A descriptive catalogue of the mammals occurring in Indiana in recent times.
Geol. Surv. Ind., XXXIII, 417-663.

Hall, E. Raymond 1926 A
A new marten from the Pleistocene cave deposits of California.
Jour. Mamm., VII, 127-130, pl. xiv.

—— 1927 A
Species of the mammalian subfamily Bassariscinæ.
Bull. Dept. Geol. Univ. Calif., XVI, 435-448, pl. lxiv, 2 text-figs.

Hall, James 1861 A
Catalogue of additions to the cabinet from January 1, 1860, to January 1, 1861.
Rep. State Cab., N. Y., XIV, 13-15.

—— 1871 B
Mounting of the Cohoes mastodon skeleton.
Rep. State Cab., N. Y., XXI, 7-9.

—— 1888 A
Report of the Director [of the State Museum of Natural History].
Rep. N. Y. State Mus., XLI, 15-48.

Hall, T. S. 1911 A
On the systematic position of the species of *Squalodon* and *Zeuglodon* described from Australia and New Zealand.
Proc. Roy. Soc. Victoria (n.s.), XXIII, 257-265, pl. xxxvi.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 132; Nature, LXXXV, 160; Sci. Progress, VI, 565.

Haller, B. 1906 A
Über den Schultergürtel der Teleostier.
Arch. mikr. Anat. Bonn, LXVII, 231-266, pls. xvi-xvii.
The bibliography consists of 15 titles.

Haller, Graf 1922 A
Über den Gaumen der amnioten Wirbeltiere. II Teil: Über den Gaumen der Säugetiere.
Zeitschr. Anat. Entwicklungsges., Abt. I, LXIV, 1-40, 23 figs.
The bibliography occupies page 40.

—— 1923 A
Ueber die Bildung der Hypophyse bei Selachiern.
Morphol. Jahrb., LIII, 95-135, 20 figs.
The literature is cited in foot-notes.

—— 1924 A
Über die Entwicklung der Hypophyse bei der Reptilien.
Morphol. Jahrb., LIII, 305-318, 9 figs.

—— 1926 A
Das Mundskelett der Wirbeltiere.
Morphol. Jahrb., LVI, 446-458, 4 text-figs.

Hamburger, Richard 1904 A
Ueber die paarigen Extremitäten von *Squalius, Trigla, Periophthalmus* und *Lophius.*
Rev. suisse Zool., XII, 71-148, pls. ii, iii.
There is a bibliography of 56 titles.

Hamilton, Marquis of 1910 A
Antlers and the classification of deer.
Field, CXVI, 199.

Hammarsten, Olof D. 1911 A
Über die Innervation der Bauchflossen bei den Teleostiern.
Morphol. Jahrb., XLII, 665-697, pl. ix, 12 text-figs.

Hancock, A., and T. **Atthey** 1869 C
On a new labyrinthodont amphibian from the Northumberland coal-field, and on the occurrence in the same locality of *Anthracosaurus russelli.*
Ann. Mag. Nat. Hist. (4), IV, 182-189.
This is the same paper as Hancock and Atthey, 1869 A.

—— —— 1869 D
Note on *Anthracosaurus.*
Ann. Mag. Nat. Hist. (4), IV, 270-271.

Hanke, Herbert 1914 A
Ein Beitrag zur Kenntnis der Anatomie des äusseren und mittleren Ohres der Bartenwale.
Jena. Zeitschr. Naturwiss., LI, 487-524, pls. vi-viii, 11 text-figs.
A portion of the literature of the subject is listed on pages 523-524.

—— 1915 A
Ueber die Brustflosse von *Mesoplodon bidens* (Sow.).
Anat. Anz., XLVIII, 59-62, 2 figs.

Hankin, E. H., and M. S. **Watson** 1914 A
On the flight of pterodactyls.
Aeronaut. Jour. London, XVIII, 324-335, 5 figs.

Hanna, G. Dallas 1919 A
Geological notes on the Pribilof Islands, Alaska, with an account of the fossil diatoms.
Amer. Jour. Sci. (4), XLVIII, 216-224.
There is a bibliography of 10 titles.

—— 1923 A
Results of preliminary examination of seven samples of sediments from near Lomita.
Bull. S. Calif. Acad. Sci., XXII, 64-65, pl. ix.

——, and Mary E. **McLellan** 1924 A
A new species of whale from the type locality of the Monterey group.
Proc. Calif. Acad. Sci. (4), XIII, 237-241, pls. v-ix.

Hannibal, Harold 1922 A
Notes on the Tertiary sirenians of the genus *Desmostylus.*
Jour. Mamm., III, 238-240, pls. xi, xii.

Hansemann, D. 1910 A

Demonstration eines *Carcharodon* zahnes aus Spitzbergen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 387-389.

Hanson, F. B. 1918 A

Nerve foramina in the pig scapula.

Anat. Record, xv, 289-297, 12 figs.

—— 1919 A

The coracoid of *Sus scrofa*.

Anat. Record, xvi, 197-202, 6 figs.

—— 1919 B

The ontogeny and phylogeny of the sternum.

Amer. Jour. Anat., xxvi, 41-115, 49 figs.
The bibliography presents 52 titles.

—— 1920 A

The history of the earliest stages in the human clavicle.

Anat. Record, xix, 309-317, pls. i-iv.
There is a bibliography of 12 titles.

—— 1920 B

The problem of the coracoid.

Anat. Record, xix, 327-342, pls. i, ii.
There is a bibliography of 15 titles.

—— 1920 C

The development of the shoulder girdle of *Sus scrofa*.

Anat. Record, xviii, 1-5, pls. 1-7.
The bibliography presents 7 titles.

Hardy, Manly 1903 A

The extinct mink from the Maine shell heaps.

Forest and Stream, lxi, 125.
Refers to *Mustela* (*Lutreola*) *macrodon* Prentiss.

Hares, C. J. 1917 A

Gastroliths in the Cloverly formation.

Jour. Wash. Acad. Sci., vii, 429.

Harkness, Harvey W. 1882 A

Footprints found at the Carson State Prison.

Proc. Calif. Acad. Sci., 1882, v, 1-7, pl.
Published only as separates.

Harkness, Robert 1852 A

On fossil footprints.

Edinb. New Philos. Jour., lii, 246-266.

Harlan, R. 1831 C

Tour to the caves of Virginia.

Monthly Amer. Jour. Geol., i, 58-67.

Harlan, R.—Continued 1833 A

Ueber eine neue Sippe der Ordnung *Enaliosauri* (*Saurocephalus*) und einen neuen *Ichthyosaurus* (*coniformis*).

Isis von Oken, 1833, 172-173, pl. i.
This is the same paper as Harlan, R., 1824 A. Appeared also in English in Tillock's Philos. Mag., lxiv, 1824, 409, pl. iii.

—— 1842 D

See Hay, O. P., 1902 A, p. 108.

Abstract in l'Institut, x, 1842, 384.

Harlé, Edouard 1901 A

Un crâne de bœuf musqué, des Eyzies (Dordogne).

Bull. Soc. géol. France (4), i, 455-458, 1 text-fig.

——, and André **Harlé** 1912 A

Le vol de grands reptiles et insectes disparus semble indiquer une pression atmospherique élevée.

Bull. Soc. géol. France (4), xi, 118-121.
Abstract in Sci. Progress, viii, 12-13.

Harless, Emil 1850 A

Ueber den Zahnbau von *Myliobates* und dem verwandten Rochen *Trikeras*.

Abh. Bayer, Akad., v, 841-876, pls. xxiii-xxv.

Harmer, Frederic William 1901 A

The influence of the winds upon climate during the Pleistocene epoch: A palæometeorological explanation of some geological problems.

Quart. Jour. Geol. Soc., lvii, 405-478, figs. 1-22.
A *résumé* of this paper was published in Bull. Soc. belge Géol., xvi, 1902, Traduct., Reprod., 47-65.

Harmer, Sidney F. 1915 A

On specimens of Cuvier's whale (*Ziphius cavirostris*) from the Irish coast.

Proc. Zool. Soc. Lond., 1915, 559-566.

—— 1924 A

On *Mesoplodon* and other beaked whales.

Proc. Zool. Soc. Lond., 1924, 541-587, pls. i-iv, 3 text-figs.
The bibliography comprises 31 titles.

—— See **Southwell** and **Harmer**.

Harper, Francis 1920 A

The Florida water-rat (*Neofiber alleni*) in Okefinokee swamp, Georgia.

Jour. Mamm., i, 65-66, pl. iii.

Harrassowitz, H. 1919 A
Eocäne Schildkröten von Messel bei Darmstadt.
Centralbl. Min. Geol. Pal., 1919, 147-154.
The bibliography presents 13 titles.

—— 1922 A
Die Schildkrötengattung *Anosteira* von Messel bei Darmstadt und ihre stammesgeschichtliche Bedeutung.
Abh. hess. geol. Landesanst., VI, 132-239, 6 pls.
Abstract in Geol. Zentralbl., XXVIII, 534.

—— 1922 B
Die Schildkrötengattung *Anosteira* von Messel bei Darmstadt und die Abstammung der Trionychiden.
Palaeont. Zeitschr., IV, 93-97.

Harris, G. D. 1899 A
A preliminary report on the geology of Louisiana.
Geol. Surv. Louisiana, pt. v, 1-354, with maps and illustrations.

Harrison, H. Spencer 1901 A
Hatteria punctata, its dentitions and its incubation period.
Anat. Anz., XX, 145-158, 6 text-figs.

—— 1901 B
The development and succession of teeth in *Hatteria punctata*.
Quart. Jour. Micr. Sci. (n.s.), XLIV, 161-213, pls. x-xii.
There is presented a bibliography of 23 titles.

Harrison, Ross Granville 1893 A
Ueber die Entwicklung der nicht-knorpelig vorgebildeten Skelettheile in den Flossen der Teleostier.
Arch. mikr. Anat. Bonn, XLII, 248-278, pls. xvi-xviii.
Appended is a bibliography of 20 titles.

—— 1894 A
The development of the fins of teleosts.
Johns Hopkins Univ. Circ., XIII, No. 111, 59-61.

—— 1895 A
Die Entwicklung der unpaaren und paarigen Flossen der Teleostier.
Arch. mikr. Anat. Bonn, XLVI, 500-578, pls. xxiv-xxvii.
There is a bibliography of 42 titles.

Harting, Pieter 1866 A
Ueber die Episternalgebilde der Vögel.
Jena. Zeitschr. Naturwiss., II, 23-25.

Hartnagel, C. A., and Sherman C. Bishop 1923 A
The mastodons, mammoths, and other Pleistocene mammals of New York State.
Bull. N. Y. State Mus., CCXLI-CCXLII, 1-110, pls. i-xxv.
The bibliography occupies pages 97-105.
This bulletin was issued in May 1923.
Abstract in Amer. Jour. Sci. (5), VI, 444.

Hartz, N. 1902 A
Beretning om Skibsexpeditionen til Grönlands Östkyst.
Meddelelser om Grönland, XXVII, pt. 3, 153-181.
Mentions, on page 167, the finding of a footprint of a dinosaur.

Hase, Albrecht 1907 A
Ueber das Schuppenkleid der Teleosteer.
Jena. Zeitschr. Naturwiss., XLII, 607-664, pls. xxxviii-xl, 26 text-figs.
There is a bibliography which includes 86 titles.

—— 1911 A
Studien über das Integument von *Cyclopterus lumpus* L. (Beitrage zur Kenntnis der Entwicklung der Haut und des Hautskelettes von Knochenfischen.)
Jena. Zeitschr. Naturwiss., XLVII, 217-342, pls. ix-xvi, 37 text-figs.
Appended is a bibliography of 214 titles.

—— 1911 B
Die morphologische Entwicklung der Ktenoidschuppe.
Anat. Anz., XL, 337-356, 28 text-figs.

—— 1913 A
Skelett der Tiere.
Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena), IX, 106-153, 76 figs.

Haseman, J. D. 1912 A
The relationship of the genus *Priscacara*.
Bull. Amer. Mus. Nat. Hist., XXXI, 97-101.

Hasse, C. 1871 A
Das Gehörorgan der Schildkröten.
Anat. Stud., I, 225-299, pls. xi-xv.
Citations of the literature in foot-notes.

—— 1871 B
Das knöcherne Labyrinth der Frösche.
Anat. Stud., I, 377-416, pl. xviii.

—— 1872 A
Das Gehörorgan der Fische.
Anat. Stud., I, 417-488, pls. xix-xxii.

Hasse, C.—Continued 1872 B
Die Entwicklung des Atlas und Epistropheus der Menschen und der Säugethiere.
Anat. Stud., I, 542-568, pl. xxv.
References to the literature in foot-notes.

—— 1873 A
Beobachtungen über die Schwimmblase der Fische.
Anat. Stud., I, 584-610, pls. xxvii, xxviii.

—— 1873 B
Ueber den Bau des Gehörorganes von *Siredon piciformis* und über die vergleichende Anatomie des Kiefersuspensorium.
Anat. Stud., I, 611-647, pl. xxix.
Citations of literature in foot-notes.

—— 1873 C
Die Morphologie des Gehörorganes von *Coluber natrix*.
Anat. Stud., I, 648-678, pl. xxx.

—— 1873 D
Das Gehörorgan der Crocodile nebst weiteren vergleichend anatomischen Bemerkungen über das mittlere Ohr der Wirbelthiere und dessen Annexa.
Anat. Stud., I, 679-750, pls. xxxi-xxxiii.

—— 1892 A
Die Entwicklung der Wirbelsäule der ungeschwänzten Amphibien.
Zeitschr. wiss. Zool., LV, 252-264.

—— 1892 B
Die Entwicklung der Wirbelsäule der Elasmobranchier.
Zeitschr. wiss. Zool., LV, 519-531, pl. xxi.

—— 1892 C
Die Entwicklung der Wirbelsäule von *Triton tæniatus*.
Zeitschr. wiss. Zool., LIII, Suppl., 1-20, pls. i-iii.

—— 1893 B
Die Entwicklung der Wirbelsäule der Dipnoi.
Zeitschr. wiss. Zool., LV, 533-542, pl. xxii.

—— 1893 C
Die Entwicklung und der Bau der Wirbelsäule der Ganoiden.
Zeitschr. wiss. Zool., LVII, 76-96, pls. v, vi.

——, and **W. Schwarck** 1870 A
Studien zur vergleichenden Anatomie der Wirbelsäule, insbesondere des Menschen und der Säugethiere.
Anat. Stud., I, 21-171, pls. iv-vii.

Hasse, Georges 1910 A
Les morses du Pliocène poederlien à Anvers.
Bull. Soc. belge Géol., XXIII, Mem., 293-322, pls. iii-vi, 43 text-figs.
Abstract in Rev. crit. Paléozool., XV, 80.
There is a bibliography of 130 titles.

—— 1911 A
Une défense de morse dans le Pliocène à Anvers.
Bull. Soc. belge Géol., Pr.-verb., XXV, 169-172, 2 text-figs.

—— 1911 B
Bovidés fossiles de l'Italie.
Bull. Soc. belge Géol., Pr.-verb., XXV, 311-322, 4 text-figs.

Haswell, W. A. 1885 B
Note on the claspers of *Heptanchus*.
Proc. Linn. Soc. N. S. Wales, IX, 381-382, pl. x.

Hatcher, J. B. 1901 A
Some new and little known fossil vertebrates.
Ann. Carnegie Mus., I, 128-144, pls. i-iv.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 286-287; Geol. Centralbl., III, 118; Rev. crit. Paléozool., VI, 100, 107.

—— 1901 B
On the cranial elements and the deciduous and permanent dentitions of *Titanotherium*.
Ann. Carnegie Mus., I, 256-262, pls. vii, viii, 1 text-fig.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 285-286; Geol. Centralbl., III, 58; Rev. crit. Paléozool., VI, 100.

—— 1901 C
The Jurassic dinosaur deposits near Canyon City, Colorado.
Ann. Carnegie Mus., I, 327-341, 5 text-figs.
Abstract in Geol. Centralbl., III, 55.

—— 1901 D
Diplodocus (Marsh): Its osteology, taxonomy, and probable habits, with a restoration of the skeleton.
Mem. Carnegie Mus., I, 1-63, pls. i-xiii, text-figs. 1-23.
Describes the new species *D. carnegii*.
Abstracts in Geol. Centralbl., III, 28; Rev. crit. Paléozool., VI, 108-113; Science (2) XIV, 531.

—— 1901 E
On the structure of the manus in *Brontosaurus*.
Science (n.s.), XIV, 1015-1017.
Abstract in Geol. Centralbl., III, 119.

Hatcher, J. B.—Continued 1902 A

A mounted skeleton of *Titanotherium dispar* Marsh.

Ann. Carnegie Mus., I, 347-355, pls. xvi-xviii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 299; Geol. Centralbl., IV, 399.

—— 1902 B

Structure of the fore limb and manus of *Brontosaurus*.

Ann. Carnegie Mus., I, 356-376, pls. xix, xx, 14 text-figs.

Abstract in Geol. Centralbl., IV, 299; Rev. crit. Paléozool., VII, 76-77.

—— 1902 C

The genera and species of the Trachodontidæ (Hadrosauridæ, Claosauridæ) Marsh.

Ann. Carnegie Mus., I, 377-386.

Abstract in Geol. Centralbl., IV, 401.

—— 1902 D

Origin of the Oligocene and Miocene deposits of the Great Plains.

Proc. Amer. Philos. Soc., XLI, 113-131.

Abstract in Bull. Soc. belge Géol., XVI 1902, Proc.-verb., 498-500.

—— 1902 E

Discovery of a musk-ox skull (*Ovibos cavifrons*) in West Virginia, near Steubenville, Ohio.

Science (n.s.), XVI, 707-709.

—— 1902 F

Oligocene Canidæ.

Mem. Carnegie Mus., I, 65-108, pls. xiv-xx, 7 text-figs.

Reviewed in Amer. Naturalist, XXXVII, 498-499; Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 308-311; Geol. Centralbl., III, 310; Rev. crit. Paléozool., VII, 168; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 126.

Although the paper is dated Sept. 1902, the author's abstract states that it was not issued until Feb. 1903.

—— 1902 G

Field work in vertebrate paleontology at the Carnegie Museum for 1902.

Science (n.s.), XVI, 752.

—— 1902 H

A correction of Professor Osborn's note entitled "New Vertebrates of the Mid-Cretaceous."

Science (n.s.), XVI, 831-832.

Abstracts in Geol. Centralbl., IX, 487; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 105.

Hatcher, J. B.—Continued 1903 A

Osteology of *Haplocanthosaurus*, with description of a new species, and remarks on the probable habits of the Sauropoda and the age and origin of the Atlantosaurus beds.

Mem. Carnegie Mus., II, 1-72, pls. i-v, 28 text-figs.

Abstracts in Geol. Centralbl., V, 144; Rev. crit. Paléozool., VIII, 78-80.

—— 1903 B

Discovery of remains of *Astrodon* (*Pleurocœlus*) in the Atlantosaurus beds of Wyoming.

Ann. Carnegie Mus., II, 9-14, 6 text-figs.

Abstracts in Geol. Centralbl., IX, 487; Rev. crit. Paléozool., VIII, 12.

—— 1903 C

Vertebrate paleontology at the Carnegie Museum.

Science (n.s.), XVIII, 569-570.

—— 1903 D

Relative age of the Lance Creek (Ceratops) beds of Converse County, Wyoming, the Judith River beds of Montana and the Belly River beds of Canada.

Amer. Geologist, XXXI, 369-375.

Abstract in Geol. Centralbl., VI, 754.

—— 1903 E

Additional remarks on *Diplodocus*.

Mem. Carnegie Mus., II, 72-75, pl. vi, 2 text-figs.

—— 1903 F

A new sauropod dinosaur from the Jurassic of Colorado.

Proc. Biol. Soc. Wash., XVI, 1, 2.

Abstracts in Rev. crit. Paléozool., VIII, 12-13; Geol. Centralbl., XIII, 241; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 165.

—— 1903 G

A new name for the dinosaur *Haplocanthus* Hatcher.

Proc. Biol. Soc. Wash., XVI, 100.

The name *Haplocanthosaurus* is proposed.

Abstract in Geol. Centralbl., XII, 70.

—— 1904 A

An attempt to correlate the marine with the non-marine formations of the Middle West.

Proc. Amer. Philos. Soc., XLIII, 341-365, 2 text-figs.

Abstract in Geol. Centralbl., VIII, 52.

Hatcher, J. B.—Continued 1905 A
Two new Ceratopsia from the Laramie of Converse County, Wyoming [with editorial notes by Richard S. Lull].
Amer. Jour. Sci. (4), xx, 413-419, pls. xii, xiii.
Abstract in Geol. Centralbl., viii, 379.

—— 1905 B
Vertebrate fauna [of the Judith River beds].
Bull. U. S. Geol. Surv., cclvii, 67-103.

—— 1907 A
The Ceratopsia.
Mon. U. S. Geol. Surv., xlix, xxix-xxx+1-157 pages; 295-300; pls. i-li, 120 text-figs.
The greater number of the illustrations of the monograph on the Ceratopsia were prepared under the direction of O. C. Marsh; the remainder under that of J. B. Hatcher and R. S. Lull.
Abstracts in Nature, lxxviii, 544-545, with figure; Neues Jahrb. Min. Geol. Pal., 1909, i, Ref., 449-450; Zeitschr. Indukt. Abstamm. Vererb.-Lehre, ii, 1909, 349-350; Sci. Progress, iii, 459; Rev. crit. Paléozool., xiii, 76-79; Amer. Jour. Sci. (4), xxvi, 98-99.

Hatschek, B. 1889 A
Die paarigen Extremitäten der Wirbeltiere.
Anat. Anz., Ergänzungsh., iv, 82-90, 4 figs.

—— 1889 B
Die Rippen der Wirbeltiere.
Anat. Anz., Ergänzungsh., iv, 113-126, 6 text-figs.

—— 1893 A
Zur Metamerie der Wirbeltiere.
Anat. Anz., viii, 89-91.

Haug, Émile 1911 A
Traité de géologie. II: Les périodes géologiques.
1908-1911, 8vo., 539-2024, pls. lxxii-cxxxv, figs. 197-485.
The genera and species cited here from Haug's work are from his faunal lists.

Haughton, Samuel 1868 A
On the muscular anatomy of the alligator.
Ann. Mag. Nat. Hist. (4), i, 282-292, pl. x.

Haughton, Sidney Henry 1918 A
Some new carnivorous Therapsida, with notes upon the brain-case in certain species.
Ann. S. African Mus., xii, 175-216, figs. 45-59.

Haughton, S. H.—Continued 1920 A
A review of the reptilian fauna of the Karroo system of South Africa.
Trans. Geol. Soc. S. Africa, xxii, 1-25, 4 figs.

—— 1924 A
On reptilian remains from the Karroo beds of East Africa.
Quart. Jour. Geol. Soc., lxxx, 1-11, pls. i, ii, 3 text-figs.
Remarks by D. M. S. Watson.

—— See **Broom** and **Haughton.**

Hawkes, Onera A. Merritt 1905 A
The presence of a vestigial sixth branchial arch in the Heterodontidæ.
Jour. Anat., Physiol. Lond., xl, 81-84, 2 text-figs.

Hawkins, A. C. 1914 A
Lockatong formation of the Triassic of New Jersey and Pennsylvania.
Ann. N. Y. Acad. Sci., xxii, 145-176, pl. vii.

Hawkins, B. Waterhouse 1871 A
Report of progress of work accomplished at the Palaeozoic Museum, in the Central Park, New York.
Proc. Lyc. Nat. Hist. N. Y., i, 179-186.

Hawn, F. 1866 A
Report of Major F. Hawn, assistant geologist.
Rep. Geol. Surv. Kansas, by G. W. Swallow, state geologist, 95-122.

Haworth, E. 1897 A
Physical properties of the Tertiary.
Univ. Kansas Geol. Surv., ii, 247-284, pls. xxxvi-xliv.

—— and J. W. **Beede** 1897 A
The McPherson Equus beds.
Univ. Kansas Geol. Surv., ii, 285-296, pls. xlv, xlvi.

Hay, O. P. 1887 A
On the manner of deposit of the glacial drift.
Amer. Jour. Sci. (3), xxxiv, 52-58.

—— 1888 A
Observations on *Amphiuma* and its young.
Amer. Naturalist, xxii, 315-321, 1 fig.

—— 1889 A
On the structure of the skull of the larva of *Amphiuma.*
Proc. Amer. Assoc. Adv. Sci., xxxvii, 286.

—— 1889 B
Notes on the habits of some amblystomas.
Amer. Naturalist, xxiii, 602-612.

Hay, O. P.—Continued 1890 A

The skeletal anatomy of *Amphiuma* during its earlier stages.

Jour. Morphol., IV, 11-34, pl. ii.

—— 1897 A

Dr. Gadow and Miss Abbott on the vertebral column of fishes.

Zool. Bull., I, 131-141.

—— 1897 B

Amphibia vs. Batrachia.

Science (n.s.), VI, 773-774.

—— 1899 H

On one little-known and one hitherto unknown species of *Saurocephalus*.

Ann. Mag. Nat. Hist. (7), III, 480-487, 5 figs.

Same as Hay, O. P., 1899 B.

—— 1901 A

Description of a new species of *Baëna* (*B. hatcheri*) from the Laramie beds of Wyoming.

Ann. Carnegie Mus., I, 325-326, pl. xv.

Abstract in Geol. Centralbl., IV, 301.

—— 1901 B

The chronological distribution of the elasmobranchs.

Trans. Amer. Philos. Soc. (2), XX, 63-75, 1 diagram.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 477-478; Geol. Centralbl., II, 766.

—— 1901 C

The composition of the shell of turtles.

Science (n.s.), XIII, 624 (abstract).

—— 1902 A

Bibliography and catalogue of the fossil Vertebrata of North America.

Bull. U. S. Geol. Surv., CLXXIX, 1-868.

Reviews in Rev. crit. Paléozool., VII, 4-6; Jour. Geol., X, 1902, 918.

Abstracts in Geol. Centralbl., III, 684, 1903; Geol. Mag. (4), IX, 569; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 84.

—— 1902 B

On the finding of the bones of the great auk (*Plautus impennis*) in Florida.

Auk, XIX, 255-258.

—— 1902 C

Descriptions of two species of extinct tortoises, one new.

Proc. Acad. Nat. Sci. Phil., LIV, 1902, 383-388, figs. 1-7.

Abstract in Geol. Centralbl., XIII, 244.

Hay, O. P.—Continued 1902 D

Description of a new species of *Cladodus* (*C. formosus*) from the Devonian of Colorado.

Amer. Geologist, XXX, 373-374, 1 figure.

Abstract in Geol. Centralbl., IV, 300.

—— 1902 E

The genus *Protosphyræna*.

Ann. N. Y. Acad. Sci., XV, 15.

See also Amer. Geologist, XXIX, 192.

—— 1902 F

Snout-fishes of Kansas.

Science (n.s.), XV, 470.

Abstracts in Ann. N. Y. Acad. Sci., 1903, XV, 15, and Amer. Geologist, XXIX, 192-193.

—— 1903 A

On certain genera and species of North American Cretaceous actinopterous fishes.

Bull. Amer. Mus. Nat. Hist., XIX, 1-95, pls. i-v, 72 text-figs.

Abstracts in Geol. Centralbl., IV, 402; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 152.

—— 1903 B

Description of a new genus and species of tortoise from the Jurassic of Colorado.

Ann. Carnegie Mus., II, 201-203, pl. iii.

Abstract in Geol. Centralbl., VI, 426.

—— 1903 C

On the existing genera of the Trionychidæ.

Proc. Amer. Philos. Soc., XLII, 268-274.

—— 1903 D

On some recent literature bearing on the Laramie formation.

Amer. Geologist, XXXII, 115-120.

—— 1903 E

Two new species of fossil turtles from Oregon.

Bull. Dept. Geol. Univ. Calif., III, 237-241, 6 text-figs.

Abstract in Geol. Centralbl., V, 376.

—— 1903 F

On an important but not well-known locality furnishing Cretaceous fishes.

Science (n.s.), XVII, 219 (abstract).

See also Bull. Geol. Soc. Amer., XIV, 542.

—— 1903 G

Some remarks on the fossil fishes of Mount Lebanon, Syria.

Amer. Naturalist, XXXVII, 685-695.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 152.

Hay, O. P.—Continued 1903 H

A collecting trip in the Bridger deposits.

Science (n.s.), XVIII, 349-350.

—— 1903 I

On a collection of Upper Cretaceous fishes from Mount Lebanon, Syria, with descriptions of four new genera and nineteen new species.

Bull. Amer. Mus. Nat. Hist., XIX, 395-452, pls. xxiv-xxxvii.

Abstract in Geol. Centralbl., IV, 403, 1903.

—— 1904 A

On some fossil turtles belonging to the Marsh collection in Yale University Museum.

Amer. Jour. Sci. (4), XVIII, 261-276, pls. xi-xvi, 7 text-figures.

Abstract in Geol. Centralbl., VI, 714.

—— 1904 B

On the finding of skulls of Trionychidæ in the Bridger deposits of Wyoming.

Science (n.s.), XIX, 254.

—— 1904 C

A new gigantic tortoise from the Miocene of Colorado.

Science (n.s.), XIX, 503-504.

Abstracts in N. Y. Acad. Sci., XVI, 312, and in Geol. Centralbl., X, 426.

—— 1905 A

On the group of fossil turtles known as the Amphichelydia; with remarks on the origin and relationships of the suborders, super-families, and families of Testudines.

Bull. Amer. Mus. Nat. Hist., XXI, 137-175, 5 text-figs.

Abstracts in Geol. Centralbl., VIII, 377; Rev. crit. Paléozool., X, 150-153.

—— 1905 B

On two species of turtles from the Judith River beds of Montana.

Ann. Carnegie Mus., III, 178-182, pl. ix, 2 text-figs.

Abstract in Geol. Centralbl., X, 371.

—— 1905 C

The progress of vertebrate palæontology at the American Museum of Natural History, New York.

Amer. Geologist, XXXV, 31-34.

—— 1905 D

Report of meeting of Section A of the American Palæontological Society.

Amer. Geologist, XXXV, 124-126.

Hay, O. P.—Continued 1905 E

A revision of the species of the family of fossil turtles called Toxychelyidæ, with descriptions of two new species of *Toxochelys* and a new species of *Porthochelys*.

Bull. Amer. Mus. Nat. Hist., XXI, 177-185, figs. 1-16.

Abstracts in Geol. Centralbl., VIII, 377; Rev. crit. Paléozool., X, 149.

—— 1905 F

On the skull of a new trionychid, *Conchochelys admirabilis*, from the Puerco beds of New Mexico.

Bull. Amer. Mus. Nat. Hist., XXI, 335-338, 3 text-figs.

Abstracts in Geol. Centralbl., VIII, 377; Rev. crit. Paléozool., XI, 149.

—— 1905 G

The fossil turtles of the Bridger basin.

Amer. Geologist, XXXV, 327-342, 1 figure.

Abstracts in Geol. Centralbl., X, 424; Ann. N. Y. Acad. Sci., XVII, 592.

—— 1905 H

The temporal roof of the skull of the reptiles.

Science (n.s.), XXI, 295-296.

—— 1905 I

On the group of fossil turtles known as the Amphichelydia.

Science (n.s.), XXI, 297.

—— 1905 J

Turtles of the Bridger basin.

Science (n.s.), XXI, 992.

Abstract in Ann. N. Y. Acad. Sci., XVII, 592.

—— 1906 A

Descriptions of new species of turtles of the genus *Testudo*, collected from the Miocene by the Carnegie Museum; together with a description of the skull of *Stylemys nebrascensis*.

Ann. Carnegie Mus., IV, 15-20, pls. iii-viii, 11 text-figures.

Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 302.

—— 1906 B

Descriptions of two new genera (*Echmatemys* and *Xenochelys*) and two new species (*Xenochelys formosa* and *Terrapene putnami*) of fossil turtles.

Bull. Amer. Mus. Nat. Hist., XXII, 27-31, 7 text-figs.

Abstracts in Neues Jahrb. Min., Geol., Pal., 1910, II, Ref., 302; Rev. crit. Paléozool., X, 150; Sci. Progress, I, 460.

Hay, O. P.—Continued 1906 C

On two interesting genera of Eocene turtles, *Chisternon* Leidy and *Anosteira* Leidy.

Bull. Amer. Mus. Nat. Hist., XXII, 155-160, 3 text-figs.

Abstracts in Geol. Centralbl., XI, 474-475; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 302; Rev. crit. Paléozool., XI, 149.

——— 1906 D

Descriptions of *Terrapene eurypygia* and *Chelydra serpentina*.

Maryland Geol. Surv. Pliocene and Pleistocene, 169, 170, pl. xl, fig. 2.

——— 1907 A

A new genus and species of fossil shark related to *Edestus* Leidy.

Science (n.s.), XXVI, 22-24, 1 fig.

——— 1907 B

Descriptions of seven new species of turtles from the Tertiary of the United States.

Bull. Amer. Mus. Nat. Hist., XXIII, 847-863, pl. liv, 20 text-figs.

Abstract in Geol. Centralbl., XI, 332.

——— 1907 C

A new fossil stickleback fish from Nevada.

Proc. U. S. Nat. Mus., XXXII, 271-273, 3 text-figs.

Abstracts in Geol. Centralbl., XI, 334; Sci. Progress, II, 522; Rev. crit. Paléozool., XI, 227.

——— 1908 A

The fossil turtles of North America.

Carnegie Instn. Wash. Publ. No. 75, i-iv+1-568 pages, pls. 1-113, 704 text-figs.

Reviewed in Science (n.s.), XXVIII, 1908, 803-804; Amer. Jour. Sci., XXVI, 516; Sci. Progress, III, 465-467; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 451-452; Geol. Zentralbl., XIII, 241-244; Science (n.s.), XXIX, 341-342; Naturw. Rundschau, XXIV, 1909, 652-654; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 159; Nature, LXXIX, 91.

——— 1908 B

Dr. W. J. Holland on the skull of *Diplodocus*.

Science (n.s.), XXVIII, 517-519.

——— 1908 C

On the habits and the pose of the sauropodus dinosaurs, especially of *Diplodocus*.

Amer. Naturalist, XLII, 672-681.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 442-443; Sci. Progress, III, 463; Nature, LXXIX, 104; Naturw. Rundschau, XXIV, 1908, 162.

Hay, O. P.—Continued 1908 D

Descriptions of five species of North American fossil turtles, four of which are new.

Proc. U. S. Nat. Mus., XXXV, 161-169, pls. xxvi-xxvii, 3 text-figs.

Abstract in Geol. Centralbl., XII, 601; Rev. crit. Paléozool., 13, 80.

——— 1908 E

On certain genera and species of carnivorous dinosaurs, with special reference to *Ceratosaurus nasicornis* Marsh.

Proc. U. S. Nat. Mus., XXXV, 351-366, 4 text-figures.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 443; Sci. Progress, III, 469; Rev. crit. Paléozool., XIII, 79; Geol. Centralbl., XIII, 203; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 160.

——— 1909 A

On the skull and brain of *Triceratops*, with notes on the brain-cases of *Iguanodon* and *Megalosaurus*.

Proc. U. S. Nat. Mus., XXXVI, 95-108, pls. i-iii.

Abstracts in Science (n.s.), XXIX, 713; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 297; Rev. crit. Paléozool., 13, 203.

——— 1909 B

Descriptions of two species of fossil turtles, *Toxochelys stenopora* and *Chisternon? interpositum*, the latter hitherto unknown.

Proc. U. S. Nat. Mus., XXXVI, 191-196, pl. v, 3 text-figs.

Abstracts in Geol. Centralbl., XIII, 204; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 298; Rev. crit. Paléozool., XIII, 154; Sci. Progress, IV, 671.

——— 1909 C

On the nature of *Edestus* and related genera, with descriptions of one new genus and 3 new species.

Proc. U. S. Nat. Mus., XXXVII, 43-61, pls. xii-xv, 7 text-figures.

Abstracts in Science Progress, IV, 675-676; in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 329; Rev. crit. Paléozool., XIV, 16-18; Nature, LXXXII, 104.

——— 1909 D

Dr. Williston on "The Fossil Turtles of North America."

Science (n.s.), XXIX, 341-342.

——— 1909 E

The poses of *Diplodocus*.

Die Umschau, Frankfurt a. M., Oct. 2, 1909, 829, fig. 5.

Hay, O. P.—Continued 1909 F

On restoration of skeletons of fossil vertebrates.

Science (n.s.), XXX, 93-95.

—— 1909 G

The geological and geographical distribution of some Pleistocene mammals.

Science (n.s.), XXX, 890-893.

Abstract in Geol. Centralbl., XIV, 487.

—— 1910 A

Descriptions of eight new species of fossil turtles from west of the one-hundredth meridian.

Proc. U. S. Nat. Mus., XXXVIII, 307-326, pls. x-xii, text-figs. 1-23.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 318; Rev. crit. Paléozool., XIV, 233.

—— 1910 B

Where do the Lance Creek ["Ceratops"] beds belong, in the Cretaceous or in the Tertiary?

Proc. Indiana Acad. Sci., XXV, 277-303. Reprint, 1-27.

Abstract in Geol. Centralbl., XVIII, 515.

—— 1910 C

On the manner of locomotion of the dinosaurs, especially *Diplodocus*, with remarks on the origin of the birds.

Proc. Wash. Acad. Sci., XII, 1-25, pl. i, 7 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 289-290; Geol. Centralbl., XV, 311-312; Sci. Progress, V, 679-680.

—— 1910 D

On the changes of climate following the disappearance of the Wisconsin ice sheet.

Die Verändungen des Klimas seit dem Maximum der letzten Eiszeit.

Internat. Geol. Congress, XI, Stockholm, 1910, 371-374.

—— 1911 A

A fossil specimen of the alligator snapper (*Macrochelys temminckii*) from Texas.

Proc. Amer. Philos. Soc., L, 452-455, pls. xviii, xix, 1 text-fig.

—— 1911 B

Further observations on the pose of the sauropodus dinosaurs.

Amer. Naturalist, XLV, 398-412.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 446; Nature, LXXXVII, 196.

Hay, O. P.—Continued 1912 A

On an important specimen of *Edestus;* with description of a new species, *Edestus mirus.*

Proc. U. S. Nat. Mus., XLII, 31-38, 2 plates.

Abstracts in Geol. Centralbl., XVIII, 523-524; Sci. Progress, VIII, 24; Rev. crit. Paléozool., XVII, 79; Nature, LXXXIX, 430.

—— 1912 B

The recognition of Pleistocene faunas.

Smithson. Misc. Coll., LIX, No. 20, 1-16, 10 figures.

Abstract in Geol. Centralbl., XIX, 644-645.

—— 1912 C

American Permian vertebrates.

Amer. Naturalist, XLVI, 561-565.

A review of Williston, 1911 B.

—— 1912 D

The Pleistocene period [in Indiana] and its Vertebrata.

Geol. Surv. Ind., XXXVI, 538-784, pls. i-xxxi, text-figs. 1-76.

—— 1912 E

Symposium on ten years progress in vertebrate paleontology. Chelonia.

Bull. Geol. Soc. Amer., XXIII, 212-220.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

—— 1913 A

Descriptions of two new species of ruminants from the Pleistocene of Iowa.

Proc. Biol. Soc. Wash., XXVI, 5-7, 1 text-fig.

—— 1913 B

Notes on some fossil horses, with descriptions of four new species.

Proc. U. S. Nat. Mus., XLIV, 569-594, pls. lxix-lxxiii, 28 text-figures.

Abstracts in Geol. Centralbl., XX, 145; Rev. crit. Paléozool., XVII, 203.

—— 1913 C

The extinct bisons of North America; with description of one new species, *Bison regius.*

Proc. U. S. Nat. Mus., XLVI, 166-200, pls. viii-xix, 10 text-figs.

Notes in L'Anthrop., Paris, XXVI, 1915, 153-154; Sci. Progress, VIII, 631. Abstracts in Neues Jahrb. Min. Geol. Pal., 1919, Ref., 220-222; Geol. Zentralbl., XXI, 37; XXIII, 350; Nature, XCII, 563.

Hay, O. P.—Continued 1913 D

Camels of the fossil genus *Camelops*.

Proc. U. S. Nat. Mus., XLVI, 267-277, pls. XXV, XXVI, 1 text-fig.

Abstracts in Sci. Progress, VIII, 633; Rev. crit. Paléozool., XIX, 10; Geol. Zentralbl., XXI, 38; Nature, XCII, 563.

—— 1913 E

Description of the skull of an extinct horse found in central Alaska.

Smithson. Misc. Coll., LXI, No. 2, 1-18, pls. i, ii, 8 text-figs.

Abstract in Geol. Centralbl., XX, 703.

—— 1914 A

The Pleistocene mammals of Iowa.

Iowa Geol. Surv., XXIII, 1-662, pls. i-lxxv, 142 text-figs.

Reviews by R. S. L(ull) in Amer. Jour. Sci. (4), XXXIX, 320-322; Geol. Mag. (6), III. 35.

—— 1915 A

Contributions to the knowledge of the mammals of the Pleistocene of North America.

Proc. U. S. Nat. Mus., XLVIII, 515-575, pls. XXX-XXXVII, 5 text-figs.

The description of *Equus francisi* was reprinted in The Veterinary Alumni Quarterly, [Columbus, Ohio], March 1916, 124-139, 2 figs.

Abstracts in Jour. Wash. Acad. Sci., V, 582-583; Nature, London, XCV, 298; Rev. crit. Paléozool., XXIII, 19-21; L'Anthropologie, XXIX, 115-117.

—— 1915 B

A contribution to the knowledge of the extinct sirenian *Desmostylus hesperus* Marsh.

Proc. U. S. Nat. Mus., XLIX, 381-397, pls. lvi-lviii.

Abstracts in Nature, XCVI, 152; in Neues Jahrb. Min. Geol. Pal., 1917, I, 106; Geol. Mag. (6), II, 567.

—— 1915 C

The extinct ground sloths of North America.

Science (n.s.), XLI, 878.

—— 1916 A

Investigation of the vertebrate paleontology of the Pleistocene epoch.

Publ. Carnegie Instn. Wash. Year Book No. 14, 386-387.

—— 1916 B

Exhibition of skull of walrus.

Science (n.s.), XLIII, 330.

Hay, O. P.—Continued 1916 C

Descriptions of some Floridian fossil vertebrates, belonging mostly to the Pleistocene.

Rep. Florida Geol. Surv., VIII, 39-76, pls. i-ix.

Abstract in Rev. crit. Paléozool., XXV, 11.

—— 1916 D

Descriptions of two extinct mammals of the order Xenarthra from the Pleistocene of Texas.

Proc. U. S. Nat. Mus., LI, 107-123, pls. iii-vii.

—— 1916 E

The Quaternary deposits at Vero, Florida, and the vertebrate remains contained therein.

Jour. Geol., XXV, 52-55.

Reprints of this paper were distributed a few days before Jan. 1, 1917.

Abstract in Geol. Zentralbl., XXX, 222-223.

—— 1916 F

A new Pleistocene sloth from Texas.

Jour. Wash. Acad., VI, 24.

—— 1917 A

A cervical vertebra of a deer from a deposit in Florida.

Science (n.s.), XLV, 72.

—— 1917 B

Descriptions of some fossil vertebrates found in Texas.

Bull. Univ. Texas, 1916, No. LXXI, 1-24, pls. i-iv. Not issued until after Jan. 1, 1917.

—— 1917 C

On the finding of supposed Pleistocene human remains at Vero, Florida.

Jour. Wash. Acad. Sci., VII, 358-359.

—— 1917 D

On a collection of fossil vertebrates made by Dr. F. W. Cragin in the Equus beds of Kansas.

Kan. Univ. Sci. Bull., X, 39-51, with pls. i-iii.

Abstract in Rev. crit. Paléozool., XXIV, 97-98.

—— 1917 E

Vertebrata mostly from stratum No. 3, at Vero, Florida, together with descriptions of new species.

Rep. Florida Geol. Surv., IX, 43-68, pl. iii, figs. 1-6.

Review in Science (n.s.), XLVII, 394-395.

Abstract in Rev. crit. Paléozool., XXV, 15.

Hay, O. P.—Continued 1917 F

Description of a new species of extinct horse, *Equus lambei*, from the Pleistocene of Yukon Territory.

Proc. U. S. Nat. Mus., LIII, 435-443, pls. lvi-lviii.

Abstract in Geol. Zentralbl., XXVII, 508.

—— 1917 G

Description of a new species of mastodon, *Gomphotherium elegans*, from the Pleistocene of Texas.

Proc. U. S. Nat. Mus., LIII, 219-221, pl. xxvi.

This paper was issued somewhat later than Hay, O. P., 1917 B.

Abstract in Geol. Zentralbl., XXVII, 508.

—— 1917 H

Dean and Eastman's Bibliography of Fishes.

Amer. Naturalist, LI, 383-384.

—— 1917 I

On species of *Bison* (Abstract).

Bull. Geol. Soc. Amer., XXVIII, 212-213.

—— 1918 A

A review of some papers on fossil man at Vero, Florida.

Science (n.s.), XLVII, 370-371.

—— 1918 B

Further consideration of the occurrence of human remains in the Pleistocene deposits at Vero, Florida.

Amer. Anthropologist, XX, 1-36, 1 map.

—— 1918 C

Quaternary vertebrates in southwestern Wisconsin.

U. S. Geol. Surv. Profess. Pap., CVI, 346-347.

—— 1918 D

Dr. Aleš Hrdlička and the Vero man.

Science (n.s.), XLVIII, 459-462.

—— 1919 A

Pleistocene geology and vertebrate paleontology of the Atlantic coast plain.

Publ. Carnegie Instn. Wash. Year Book No. 17 (1918), 311-312.

—— 1919 B

On some proboscideans of the State of New York.

Science (n.s.), XLIX, 377-379.

Hay, O. P.—Continued 1919 C

Description of some mammalian and fish remains from Florida, of probably Pleistocene age.

Proc. U. S. Nat. Mus., LVI, 103-112, pls. xxvi-xxviii.

Brief review in Rev. crit. Paléozool., XXIV, 140.

Abstract in Geol. Zentralbl., XXVII, 362.

—— 1919 D

On the relative ages of some Pleistocene deposits.

Amer. Jour. Sci. (4), XLVII, 361-375.

Abstract in Geol. Zentralbl., XXV, 269.

—— 1920 A

Report on work on Pleistocene paleontology.

Publ. Carnegie Instn. Wash. Year Book No. 18, 361-362.

—— 1920 B

Descriptions of some Pleistocene vertebrates found in the United States.

Proc. U. S. Nat. Mus., LVIII, 83-146, pls. iii-xi, 4 text-figs.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 96-98; Neues Jahrb. Min. Geol. Pal., 1923, I, 309.

Review in Rev. crit. Paléozool., XXVII, 14.

—— 1921 A

Descriptions of species of Pleistocene Vertebrata, types of specimens of most of which are preserved in the United States National Museum.

Proc. U. S. Nat. Mus., LIX, 599-642, with pls. cxvi-cxxiv.

Abstract in Rev. crit. Paléozool., XXVI, 133.

—— 1921 B

Report on investigation of work on the Pleistocene vertebrata.

Publ. Carnegie Instn. Wash. Year Book No. 19, for 1920, 402-404.

—— 1922 A

Report on work done on the Pleistocene epoch and its vertebrate animals.

Publ. Carnegie Instn. Wash. Year Book No. 20, 445-446.

—— 1922 B

Description of a new fossil sea cow from Florida, *Metaxytherium floridanum*.

Proc. U. S. Nat. Mus., LXI, art. 17, 1-4, pl. i. Abstract in Rev. Geol. et Sci. conn., IV, 1923, 94. (Place of publication wrongly stated.)

Review in Rev. crit. Paléozool., XXVII, 12.

Hay, O. P.—Continued 1922 C

On the phylogeny of the shell of the Testudinata and the relationships of *Dermochelys*.

Bibl. Serv. Wistar Inst., card 1043 (abstract).

—— 1922 D

Observations on some extinct elephants.

1-19 pages, pls. i-iv; text-figs. 1-10.

Washington. Distributed by the author, June 12, 1922.

—— 1922 E

On the phylogeny of the shell of the Testudinata and the relationships of *Dermochelys*.

Jour. Morphol., xxxvi, 421-445, pls. i, ii, 1 text-fig.

—— 1922 F

Further observations on some extinct elephants.

Proc. Biol. Soc. Wash., xxxv, 97-102.

—— 1922 G

Note on *Desmostylus hesperus*.

Acta Zool., iii, 392-393.

In Abel, O., 1922 E.

—— 1923 A

The Pleistocene of North America and its vertebrated animals from the States east of the Mississippi River and from the Canadian Provinces east of longitude 95°.

Publ. Carnegie Instn. Wash., No. 322, i-vii+1-499 pages, with 41 maps and 25 text-figs.

Noticed in Amer. Jour. Sci. (5), v, 424-425; Nature, cxii, 111.

—— 1923 B

Characteristics of sundry fossil vertebrates.

Pan-Amer. Geol., xxxix, 101-120, pls. vii-ix, text-figs. 4, 5.

—— 1923 C

Description of remains of *Bison occidentalis* from central Minnesota.

Proc. U. S. Nat. Mus., lxiii, art. 5, 1-8, pls. i, ii.

Review in Rev. crit. Paléozool., xxviii, 166, 1924.

Abstract in Nature, cxii, 67.

—— 1923 D

Oligocene sea turtles of South Carolina.

Pan-Amer. Geol., xl, 29-31, pls. ii, iii.

Hay, O. P.—Continued 1923 E

Report on work done on the Pleistocene epoch and its vertebrate fossils.

Publ. Carnegie Instn. Wash. Year Book No. 21, 395.

—— 1924 A

Description of some fossil vertebrates from the Upper Miocene of Texas.

Proc. Biol. Soc. Wash., xxxvii, 1-19, pls. i-vi, 1 text-fig.

—— 1924 B

On the geological age of the Walker Hotel swamp deposit, in Washington, D. C., and on the origin and the age of the coastal plain terraces in general.

Jour. Wash. Acad. Sci., xiv, 255-264.

—— 1924 C

Notes on the osteology and dentition of the genera *Desmostylus* and *Cornwallius*.

Proc. U. S. Nat. Mus., lxv, art. 8, 1-8, 2 pls., 2 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, i, 446.

—— 1924 D

The Pleistocene of the middle region of North America and its vertebrated animals.

Publ. Carnegie Instn. Wash. 322 A, i-vii+1-385 pages, 29 maps, 5 text-figs.

Remarks on in Amer. Jour. Sci. (5), ix, 83; Jour. Geol., xxxiii, 753.

Abstract in Geol. Zentralbl., xxxiii, 32.

—— 1924 E

On the status of privately issued papers on systematic zoology.

Proc. Biol. Soc. Wash., xxxvii, 109-112.

—— 1925 A

A further and detailed description of the type of *Elephas roosevelti* and descriptions of three referred specimens.

Proc. U. S. Nat. Mus., lxvi, art. 34, 1-6, pls. i-iv, 1 text-fig.

—— 1925 B

On remains of mastodons found in Texas, *Anancus brazosius* and *Gomphotherium cimarronis*.

Proc. U. S. Nat. Mus., lxvi, art. 35, 1-5, pls. 1-4, 9 text-figs.

—— 1925 C

Extinct proboscideans of Mexico.

Pan-Amer. Geol., xliv, 21-37, pls. iii, iv.

—— 1925 D

On the correlation of certain Pleistocene deposits and their fossils.

Jour. Wash. Acad. Sci., xv, 239-246.

Hay, O. P.—Continued 1925 E
Review of Dr. Günther Schlesinger's paper on mastodons.
Jour. Wash. Acad. Sci., xv, 381-387.

—— 1926 A
Two new Pleistocene mastodons.
Jour. Wash. Acad. Sci., xvi, 35-41, pls. i, ii.

—— 1926 B
Description of remains of an elephant found at Port Williams, Washington.
Jour. Wash. Acad. Sci., xvi, 154-159, with plate.

—— 1926 C
A collection of Pleistocene vertebrates from southwestern Texas.
Proc. U. S. Nat. Mus., lxviii, art. 24, 1-18, pls. i-viii, 2 text-figs.

—— 1926 D
The geological age of Tuolumne Table Mountain.
Jour. Wash. Acad. Sci., xvi, 358-361.

—— 1926 E
On the geological age of Pleistocene vertebrates found at Vero and Melbourne, Florida.
Jour. Wash. Acad. Sci., xvi, 387-392.

—— 1926 F
Professor Osborn on the mammals and the birds of the California tar pools.
Science (n.s.), lxiv, 426-427.

—— 1927 A
On the type skull of *Equus laurentius* Hay.
Jour. Wash. Acad. Sci., xvii, 5-7.

—— 1927 B
The prong-horn antelope in Illinois.
Jour. Mamm., viii, 61-62.

—— 1927 C
A review of recent reports on investigations made in Florida on Pleistocene geology and palæontology.
Jour. Wash. Acad. Sci., xvii, 277-283.

—— 1927 D
The Pleistocene of the western region of North America and its vertebrated animals.
Publ. Carnegie Instn. Wash., 322 B, i-v+1-346 pages, pls. i-xii, 21 maps, 19 text-figs.
The citations from this volume are mostly made to the index.

Hay, O. P.—Continued 1927 E
Correlation on the basis of fossil vertebrates.
Geol. Soc. Amer. Preliminary list for 40th meet. Cleveland, 1927, 76-77.

—— 1928 A
Further consideration of the skull of *Chelys* and of the constitution of the armor of turtles in general.
Proc. U. S. Nat. Mus., lxxiii, art. 3, 1-12, 2 pls.

Hay, Robert 1885 A
Note on the fossil jaw of *Bison*, from the Pliocene of Norton County [Kansas].
Trans. Kansas Acad. Sci., ix, 98.
The jaw was found in the Equus beds.

—— 1890 A
A geological reconnaisance in southwestern Kansas.
Bull. U. S. Geol. Surv., lvii, 1-50, pls. i, ii, 21 text-figs.

—— 1896 A
The geology of the Fort Riley military reservation and vicinity, Kansas.
Bull. U. S. Geol. Surv., cxxxvii, 1-34, pls. i-vii, 4 text-figs.

Hay, W. P. 1916 A
Notes on the growth of the loggerhead turtle.
Jour. Wash. Acad. Sci., vi, 258.

Hayden, F. V. 1871 A
Preliminary report of the U. S. Geological Survey of Wyoming and portions of contiguous territories. (Being a second annual report of progress.)
Washington, 8vo., 1-188, illustrations.

—— 1872 A
Final report of the United States Geological Survey of Nebraska and portions of the adjacent Territories.
Washington, D. C., 1-264 pages, with maps and illustrations.

Hayden, Horace H. 1820 A
Geological essays; or an inquiry into some of the geological phenomena to be found in various parts of America and elsewhere.
Baltimore, 1820, i-viii+1-412 pages.

Hayek, Heinrich 1924 A
Über das Schicksal des Proatlas und über die Entwicklung der Kopfgelenke bei Reptilien und Vögeln.
Morphol. Jahrb., liii, 137-163, 2 pls.
The bibliography includes 25 titles.

Hayek, Heinz 1926 A

Ueber den Processus paramastoideus beim Menschen und bei Säugetieren und den Ponticulus lateralis atlantis.

Verh. Anat. Ges., xxxv, 176-179.

Hayes, C. W., and William **Kennedy** 1903 A

Oil fields of the Texas-Louisiana Gulf coastal plain.

Bull. U. S. Geol. Surv., ccxii, 1-174, maps and figures.

Hayes, Seth 1895 A

See Hay, O. P., 1902 A, 111. Abstract in Amer. Geol., xv, 272.

—— 1895 B

The Shaw mastodon. An examination and description of mastodon and accompanying mammalian remains found near Cincinnati, June 1894.

Rep. Ohio Acad. Sci., iii, 37-41, 1 plate.

Haymond, Rufus 1869 A

Geology of Franklin County [Indiana].

Geol. Surv. Ind., i, 175-235.

Haynes, Henry W. 1889 A

The prehistoric archæology of North America.

Narrative and critical history of North America. Edited by Justin Winsor. Boston and New York, 1889, 328-368 pages.

Heckel, Johann Jacob 1836 A

Über einige neue, oder nicht gehörig unterschiedene Cyprinen, nebst einer systematischen Darstellung der europäischen Gattungen dieser Gruppe.

Ann. Wien. Mus., Zool. Abh., i, 219-234, pls. xix-xxi.

—— 1850 B

Ueber das Wirbelsäulen-Ende bei Ganoiden und Teleostiern.

Sitz.-Ber. Akad. Wiss. Wien, v, 143-148.

—— 1851 A

Ueber die Ordnung der Chondrostei und die Gattungen *Amia*, *Cyclurus*, *Notœus*.

Sitz.-Ber. Akad. Wiss. Wien, vi, 219-224.

Heilmann, Gerhard 1913 A

Vor nuvaerende Viden om Fuglenes Afstamning. (What we know about the descent of birds.) Første Afsnit.

Dansk ornith. For. Tidsskr., vii, 1-71, 50 figs.

Heilmann, Gerhard—Continued 1913 B

Vor nuvaerende Viden om Fuglenes Afstamning. Andet Afsnit.

Dansk ornith. For. Tidsskr., viii, 1-92, figs. 51-109.

Review in Aquila, xxii, 1915, 394-396.

—— 1914 A

Same general titles as Heilmann, G., 1913 A.

Traek of Fosterudviklingen hos Krybdyr og Fugle. Tredje Afsnit.

Dansk ornith. For. Tidsskr., ix, 1-96, figs. 110-159.

—— 1915 A

Same general title as Heilmann, G., 1913 A. Fjerde Afsnit. Anatomisk-biologisk Sammenligning.

Dansk ornith. For. Tidsskr., ix, 92-160, figs. 160-186.

—— 1916 A

Same general title as Heilmann, G., 1913 A. Femte Afsnit. Forfuglen *Proavis*.

Dansk ornith. For. Tidsskr., x, 73-144, figs. 187-215.

—— 1916 B

Fuglenes Afstamning.

Kjöbenhaven, 1916, liii+398 pages, 215 figs.

This book, not seen by the present writer, is a collection of the parts 1-5 recorded under Heilmann, 1913 A, 1913 B, 1914 A, 1915 A, and 1916 A. For an abstract see Geol. Zentralbl., xxiii, 413.

—— 1926 A

The origin of birds.

8vo., London, i-iii+1-208 pages, 2 colored pls., 142 text-figs.

Bibliographies on pages 63, 98, 133, 201.

Heilprin, Angelo 1887 A

The geographical and geological distribution of animals.

International Scientific Series, New York and London. 8vo., i-xii+1-435 pages, with map.

—— 1888 A

Report of the curators.

Proc. Acad. Nat. Sci. Phila. for 1887, 411-416.

—— 1901 A

Fossils and their teachings.

Scient. Amer. Suppl., lii, 21472-21473.

Heim, Arnold 1905 A

Über die Bedeutung der Wirbelstacheln der Naosauriden.

Zeitschr. deutsch. Geol. Ges., lvii, Monatsb., 194-195.

Heinick, Paul 1908 A
Über die Entwicklung des Zahnsystems von *Castor fiber* L.
Zool. Jahrb., Anat., XXVI, 355-402, pls. XIX, XX, 18 text-figs.
There is appended a bibliography of 32 titles.

Heinrich, G. 1909 A
Die Entwicklung des Zahnbeins bei Säugetieren.
Arch. mikr., Anat. Bonn, LXXIV, 781-811, pls. XI, XII.
There is a bibliography of 32 titles.

Heinroth, O. 1923 A
Die Flügel von *Archæopteryx*.
Jour. Ornith., LXXI, 277-283, pls. III-V.

Hellman, M. See **Gregory**, W. K., and M. **Hellman**.

Henckel, K. O. 1927 A
Zur Entwickelungsgeschichte des Halbaffenschädels.
Zeitschr. Morphol. Anthrop., XXVI, 365-383, pls. X-XIV.
The bibliography includes 25 titles.

Henderson, Julius 1904 A
Stones in stomachs of plesiosaurs.
Science (n.s.), XX, 466.

—— 1924 A
Footprints in Pennsylvanian sandstones of Colorado.
Jour. Geol., XXXII, 226-229, 3 figs.
Comment on in Science (n.s.), LX, Nov. 28, 1924, Science News, XII.
Abstract in Geol. Zentralbl., XXXIII, 93.

Hennicke, Carl 1902 A
Ueber die Anpassung des Gehörorganes der Wassersäugethiere an das Leben im Wasser.
Monatschr. Ohrenheilk., XXXVI, 157-179.

Hennig, Edwin 1906 A
Gyrodus und die Organisation der Pyknodonten.
Palæontogr., LIII, 137-206, pls. X-XIII, 16 text-figs.
Abstracts in Geol. Centralbl., X, 426-427; Sci. Progress, I, 462.

—— 1907 A
Ueber einige Pyknodonten vom Libanon.
Centralbl. Min. Geol. Pal., 1907, 360-371, 5 text-figs.
Abstract in Geol. Centralbl., XVIII, 235.

—— 1907 B
Macropetalichthys pelmensis n. sp.
Centralbl. Min. Geol. Pal., 1907, 584-591, 5 text-figs.
Abstracts in Geol. Centralbl., XII, 520-521; Sci. Progress, II, 524.

Hennig, Edwin—Continued 1912 A
Die Fischfauna der Kreidezeit.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1912, 483-493.
Abstract in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 165-166.

—— 1912 B
Lebensverhältnisse der Dinosaurier.
Abh. naturw. Ges. Isis, 1912, 96-100.

—— 1914 A
Die Fischreste unter den Funden der Tendaguru-Expedition.
Arch. Biontol., III, 295-312, pl. XXIII, 4 text-figs.

—— 1915 A
Über dorsale Wirbelsäulenkrümmung fossiler Vertebraten.
Centralbl. Min. Geol. Pal., 1915, 575-577.
Abstract in Geol. Zentralbl., XXII, 124.

—— 1915 B
Kentrosaurus æthiopicus, der Stegosauride des Tendaguru.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1915, 219-247, 14 figs.
Abstract in Geol. Zentralbl., XXII, 158.

—— 1915 C
Otolithen bei *Palæoniscus*.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1915, 52-55.

—— 1915 D
Stegosauria.
Fossilium Catalogus, I, Animalia, Pt. IX, 1-16.
A list of the genera and species with references to the principal literature.

—— 1915 E
Eine neue Platte mit *Semionotus capensis*.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 49-52.

—— 1916 A
Zweite Mitteilung über den Stegosauriden vom Tendaguru.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1916, 175-182, pl. IV.
Abstract in Geol. Zentralbl., XXIII, 351.

—— 1919 A
Die Entstehung des Säugerzahns und die Paläontologie.
Naturw. Wochenschr. (n.s.), XVIII, No. 51, 1-7, figs.

—— 1919 B
Ueber *Ptycholepis bollensis* Ag.
Jahresh. Ver. Naturk. Württemb., LXXIV, 173-182, pl. III.
Abstract in Neues Jahrb. Min. Geol. Pal., 1920, Ref., 111.

Hennig, Edwin—Continued 1920 A

Ein Cladodus-Fund im mitteldeutschen Devon.

Centralbl. Min. Geol. Pal., 1920, 16-20, 1 fig.

—— 1920 B

Review of Schlosser's work on Pisces in Zittel's "Grundzüge der Pälaontologie," 1918.

Neues Jahrb. Min. Geol. Pal., 1920, I, Ref., 112-113.

—— 1921 A

Die Saügerzähne des württembergischen Rhät-Lias-Bonebeds.

Jahrb. Min. Geol. Pal. Beilage-Bd., XLVI, 181-267, pls. ii-v.

There is a bibliography of 40 titles.

—— 1921 B

Review of H. Dinkel's dissertation (Tübingen, 1917) on "Squatinen im Weissen Jura Schwabens."

Neues Jahrb. Min. Geol. Pal., 1921, Ref., 117.

—— 1922 A

Die Säugerzähne des württembergischen Rhät-Lias-Bonebeds.

Neues Jahrb. Min. Geol. Pal. Beilage-Bd., XLVI, 181-267, pls. ii-v, 4 text-figs.

There are 40 titles in the bibliography.

—— 1924 A

Kentrosaurus aethiopicus. Die Stegosaurier-Funde vom Tendaguru, Deutsch-Ostafrika.

Palaeontogr. Suppl.-Bd., VII, 101-253, pls. i-iv, 2 folders, 92 text-figs.

The bibliography is found on pages 135-137.

—— 1925 A

Ein Drache aus Deutsch-Ostafrika.

Die Umschau, Leipzig, XXIX, 108-110, 2 figs.

Henning, Charles L. 1912 A

Untergang des Wapiti in Colorado und Wyoming.

Naturw. Wochenschr., XXXVII (N.F. XI), 602-604.

—— 1914 A

Ueber neuere Saurierfunde aus Canada und deren geologische Position.

Naturwiss., Berlin, II, 769-776, 9 figs.

Henry, Joseph 1869 A

Ancient basket-work from Petite Anse Island, near Vermilion Bay Louisiana.

Trans. Chicago Acad. Sci., I, 233-234.

Reported finding of Indian basket work two feet below bones of elephant.

Hensel, R. 1853 A

Ueber die Verschiedenheiten im Schädelbau der *Mustela martes* und *M. foina.*

Arch. Naturges., XIX, Bd. I, 17-22, pl. ii.

—— 1879 A

Ueber Homologien und Varianten in den Zahnformeln einiger Säugethiere.

Morphol. Jahrb., V, 529-561.

Henshaw, Henry W. 1883 A

Animal carvings from mounds of the Mississippi Valley.

Rep. Bur. Ethnol., II, 117-166, 35 illustrations.

—— 1912 A

Number of species of living vertebrates.

Science (n.s.), XXXVI, 317-318.

Hentschel, Ernst 1910 A

Über einen bei Neufundland gefangenen Pottwal (*Physeter macrocephalus* L.)

Zool. Anz., XXXVI, 417-425, 5 text-figs.

Hepburn, David 1901 A

The pelvic cavity of the porpoise (*Phocæna communis*) as guide to the determination of a sacral region in Cetacea.

Rep. Brit. Assoc. Adv. Sci., LXXI, Glasgow, 1901, 680-681.

Herman, Otto 1902 A

Die Bedeutung der Anatomie der Vögel.

Aquila (Budapest), IX, 1-11.

Text in Hungarian and German.

Hermann, Adam 1908 A

Modern methods of excavating, preparing and mounting fossil skeletons.

Amer. Naturalist, XLII, 43-47.

—— 1909 A

Modern laboratory methods in vertebrate palæontology.

Bull. Amer. Mus. Nat. Hist., XXVI, 283-331, pls. lii-lvii, 18 text-figs.

Hermann, Rudolf 1907 A

Über das Vorkommen hohler Zähne bei fossilen und lebenden Tiere.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1907, 195-201, 5 text-figs.

—— 1907 B

Weitere Beobachtungen über Zahndefecte bei fossilen und lebenden Tieren.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1907, 284-288, 2 text-figs.

Abstract in Geol. Centralbl., XI, 598.

Hermann, Rudolf—Continued 1908 A
Caries bei Mastodon.
Anat. Anz., XXXII, 305-313, pl. iv, 4 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 161.

—— 1909 A
Die Rehgehörne der geologisch-paläontologischen Sammlung des westpreussischen Provinzial-Museums in Danzig, mit besonderer Berücksichtigung hyperplastischer und abnormer Bildungen.
Schrift. naturf. Ges. Danzig (N.F.), XII, Heft 3, 81-101, pl. viii, 2 text-figs.
Abstract in Geol. Centralbl., XIII, 541.

—— 1910 A
Zahnkrankheiten fossiler und wildlebender Tiere.
Schrift. naturf. Ges. Danzig (N.F.), XII, Heft 4, 96-100, 4 figs.

Heronimus, C. 1911 A
Die Entwickelung des Brustflossenskelettes, bei *Amia calva.*
Anat. Anz., XXXIX, 193-203, 8 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 170.

Hertwig, Oscar 1874 B
Ueber das Zahnsystem der Amphibien und seine Bedeutung für die Genese des Skelets der Mundhohle.
Arch. micr. Anat., XI, Suppl.-Heft, i-viii +1-208 pages, pls. i-v.
References to the literature of the subject are put in foot-notes.

—— 1879 B
Das Hautskelet von *Lepidosteus* und *Polypterus.*
Jena. Zeitschr. Naturwiss., XII (N. F., V.), lxxx-lxxxii.

—— 1892 A
Text-book of the embryology of man and mammals.
i-xvi+1-670 pages, 339 text-figs.
An English translation of 3d edition of Hertwig's "Lehrbuch der Entwicklungsgeschichte des Menschen und der Wirbelthiere." There are abundant references to other books and papers dealing with the subject.

Hertz, Mathilde 1925 A
Beobachtungen an primitiven Säugetiergebissen.
Zeitschr. Morphol. Ökol. Tiere, IV, 540-580, 40 figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 87-89.

Herz, O. F. 1902 A
Rapport du chef de l'expédition de l'Académie Impériale des Sciences à la rivière Bérésovska pour l'excavation d'un corps de mammouth.
Bull. Acad. Sci. St. Pétersb. (5), XVI, April, 137-174, pls. i-vii.
In Russian. Translated into German and issued separately 1902, 1-38, pls. i-x.
Review in Annuaire Géol. Min. Russie, VI, 13-14; IX, 139-140.
Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 118.

—— 1904 A
Frozen mammoth in Siberia.
Rep. Smithson. Instn. for 1903, 611-625, pls. i-ix, 3 text-figs.
Extracts translated from Bull. Acad. St. Pétersb. (5), XVI, 1902.

Hescheler, K. 1906 A
Die Vorfahrenreihe des Pferdes.
Jahrb. St. Gallisch. naturw. Ges., 1906, 29-32.

Hess, —— 1910 A
Unterkiefer von *Elephas primigenius* im Zahnwechsel.
Centralbl. Min. Geol. Pal., 1910, 711.
Abstract in Geol. Centralbl., XV, 720.

Hesse, H. 1907 A
Ueber den inneren knöckernen Bau des Vogelschnabels.
Jour. Ornith., LV, 185-248, pls. vi-xi, 9 text-figs.

Heusinger, C. F. 1822 A
Ueber einige Besonderheiten des Eulenflügels.
Deutsch. Arch. Physiol., VII, 177-197.

Hickling, George 1909 A
British Permian footprints.
Mem. Manchester Soc., LIII, No. 22, 1-24, pls. i-iv.
The bibliography presents 48 titles.

—— 1917 A
The skull of a Permian shark.
Nature, XCIX, 79.

Higgins, George Marsh 1920 A
The morphology of the antorbital process in the urodeles.
Trans. Ill. State. Acad. Sci. XIII, 292-298.
The bibliography presents 6 titles.

—— 1923 A
Development of the primitive reptilian vertebral column, as shown by a study of *Alligator mississippiensis.*
Amer. Jour. Anat., XXXI, 373-406, pls. I-vi.

Higley, W. K. 1891 A
Geology of Cook County, Illinois.
Bull. Chicago Acad. Sci., II, No. 1, viii-xv, 2 figs.

[**Hildreth**, Samuel Prescott] 1834 A

Ten days in Ohio; from the diary of a naturalist.

Amer. Jour. Sci. (1), xxv, 217-258.
Published anonymously.

—— 1835 A

Remains of fossil Mammalia, fish, etc.

Amer. Jour. Sci. (1), xxix, 146-147.
Part of an extended article.

—— 1837 A

Miscellaneous observations made during a tour in May 1835, to the falls of the Cuyahoga, near Lake Erie; extracted from the diary of a naturalist.

Amer. Jour. Sci. (1), xxxi, 1-84.
Description of a fossil *"Ovis mammillaris,"* fig. 19, and of a fossil beaver (*Castoroides*), figs. 16-18.
In Hay, O. P., 1902 A, p. 91, this paper is wrongly credited to J. W. Foster.

Hilgard, Eugene W. 1863 A

Report on the geology and agriculture of Mississippi.

i-xiii+1-391 pages, with a geological map of the State. This is the same publication as Hilgard, E. W., 1860 A. In vol. III of the Mississippi Historical Society, 228, Hilgard stated that this work was not distributed until early in 1866. The following letter is attached to a copy in the U. S. National Museum:

Washington, March 18, 1863.

Dear Sir: I have the pleasure of sending you by mail, on the part of the Author, my brother, a copy of his Report on the geology and agriculture of the State of Mississippi. The publication of this volume has been delayed until now by the disturbed state of political affairs. Yours very respectfully,

(Signed) J. E. Hilgard.

Dr. F. B. Meek, Albany.

—— 1869 A

On the geology of lower Louisiana and the rock-salt deposit of Petite Anse.

Amer. Jour. Sci. (1), xlvii, 77-88.

—— 1872 A

On the geology of lower Louisiana and the salt deposit on Petite Anse Island.

Smithson. Contrib. Knowl., xxiii, art. 248, 1-34, figs. and maps.

Hilgard, Theodore Charles 1857 A

On the skull of Vertebrata.

Trans. Acad. Sci. St. Louis, I, 98-99.

Hilgard, Theodore C.—Cont'd 1858 A

On the structure of the head in Vertebrata and its relation to the phyllotactic laws.

Proc. Amer. Assoc. Adv. Sci., xi, Montreal, 1857, 81-95.

—— 1859 A

On the skull of Vertebrata.

Trans. Acad. Sci. St. Louis, I, 335-337.

—— 1860 A

Comparative anatomy of Vertebrata.

Trans. Acad. Sci. St. Louis, I, 678-682.

Hilgendorf, F. 1888 A

Bemerkungen über die Histologie der *Pristis* Zähne.

Sitz.-Ber., Ges. naturf. Freunde Berlin, 1888, 109-110.

Hill, Charles M. 1899 A

Primary segments of the vertebrate head.

Anat. Anz., xvi, 353-369, 22 figs.

—— 1900 A

Developmental history of primary segments of the vertebrate head.

Zool. Jahrb., Anat., xiii, 393-446, pls. xxviii-xxx, 4 text-figs.
The bibliography occupies pages 436-440.

Hill, James P. 1897 A

The placentation of *Perameles*.

Quart. Jour. Micr. Sci. (n.s.), xl, 385-446, pls. xxix-xxxiii.
There is a bibliography of 21 titles.

—— 1920 A

The affinities of *Tarsius* from the embryological aspect.

Proc. Zool. Soc. Lond., 1919 (1920), 476-491, pl. i, 5 text-figs.

Hill, Robert T. 1901 A

Geography and geology of the Black and Grand Prairies, Texas, with detailed descriptions of the Cretaceous formations and special reference to artesian waters.

Rep. U. S. Geol. Surv., xxi, pt. vii, 1-666, pls. i-lxxi, 80 text-figs.

——, and T. Wayland **Vaughan** 1898 A

Geology of the Edwards Plateau and Rio Grande Plain adjacent to Austin and San Antonio, Texas.

Rep. U. S. Geol. Surv., xviii, pt. 2, 193-321, pls. xxi-xlix, text-figs. 53-76.

Hills, R. C. 1889 A

Additional notes on the Huerfano beds.

Proc. Col. Sci. Soc., iii, 217-223.

Hill-Tout, Charles 1924 A

Man closer to ancestral type than anthropoid apes.

Pan-Amer. Geol., XLII, 236.

Hilzheimer, Max 1905 A

Variationen des Canidengebisses mit besonderer Berücksichtigung des Haushundes.

Zeitschr. Morphol. Anthrop., IX, 1-40, pls. i-v, 2 tables.

The bibliography comprises 17 titles.

Abstract in Arch. Rassenbiol., III, 1906, 417-418.

—— 1905 B

Ueber einige Tigerschädel aus der Strassburger zoologischen Sammlung.

Zool. Anz., XXVIII, 594-599, 6 text-figs.

—— 1909 A

Wisent und Ur im K. Naturalienkabinett zu Stuttgart.

Jahresh. Ver. Naturk. Württemb., LXV, 241-269, pls. vi, vii, 2 text-figs.

This paper forms No. 66 of the Mitt. Nat.-Kab., Stuttgart. Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 132-133.

—— 1909 B

Wie hat das Mammut ausgesehen?

Aus der Natur, V, 455-463, 8 text-figs.

—— 1910 A

Beitrag zur Kenntnis der fossilen Bisonten.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 136-146, 1 table, 9 text-figs.

Treats of the European fossil bisons and names new species and sub-species.

Abstract in Geol. Centralbl., XV, 720-721.

—— 1910 B

Zur systematischen Bedeutung des Tränenbeines.

Zool. Anz., XXXVI, 42-47.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 53.

—— 1912 A

Über ein Pferd der Völkerwanderungszeit.

Zool. Anz., XL, 105-117, 2 text-figs.

—— 1913 A

Stammesgeschichte der Wirbeltiere.

Monatsh. naturw. Unterr. (n.s.), VI, 465-475, 512-523, 564-570, 18 text-figs.

—— 1920 A

Dritter Beitrag zur Kenntnis der Bisonten.

Arch. Naturges., LXXX, 1918, H. 6, 41-87, 25 figs.

The bibliography presents 27 titles.

Hilzheimer, Max—Continued 1921 A

Ueber den Epistropheus des Moschusochsen mit besonderer Berücksichtigung eines noch nicht beschriebenen fossilen Epistropheus aus Frankfort a. O.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1921, 142-149, with figs. (Not issued until April 15, 1922.)

—— 1921 B

Die Halswirbelsäule von *Bos* und *Bison*.

Arch. Naturges., LXXXVII, Abth. A. Heft 7, 1-63.

Abstract in Geol. Zentralbl., XXVII, 476.

—— 1922 A

Über die Systematik einiger fossiler Cerviden.

Centralbl. Min. Geol. Pal., 1922, 712-717, 741-749.

Abstract in Geol. Zentralbl., XXIX, 349.

Himstedt, R. 1870 A

Über einige Besonderheiten der Schädelknochen von *Lepus* und über das knöcherne Gehörorgan desselben Genus.

Arch. Anat. Physiol. Med., 1870, 437-453, pl. xi.

Hinton, Martin A. C. 1911 A

The British fossil shrews.

Geol. Mag. (5), VIII, 529-539, pl. xxv, 11 text-figs.

—— 1923 A

The dental formula of the Muridæ, with especial reference to the "mp^4 theory."

Ann. Mag. Nat. Hist. (9), XI, 162-170.

Hinze, Robert 1910 A

Die Bedeutung der sog. Kastanien an den Gliedmassen der Einhufer.

Zool. Anz., XXXV, 372-380.

Hisaw, Frederick L. 1924 A

The absorption of the pubic symphysis of the pocket gopher, *Geomys bursarius* Shaw.

Amer. Naturalist, LVIII, 93-96.

Hitchcock, Charles H. 1868 A

New American fishes from the Devonian.

Geol. Mag. (1), V, 184-185.

Abstract in Neues Jahrb. Min. Geol. Pal., 1868, 874.

—— 1871 A

Account and complete list of the Ichnozoa of the Connecticut Valley.

Walling and Gray's Official Topographical Atlas of Massachusetts, pages xx-xxi.

Hitchcock, Charles H.—Cont'd 1898 A
Recent progress in ichnology.
Mon. U. S. Geol. Surv., XXIX, 400-406.

—— 1927 A
Lecture upon ichnology.
Amer. Midl. Nat., X, 162-184.
With a poem by Edward Hitchcock. Edited by N. M. Grier.

——, and Norman M. **Grier** 1927 A
The Dartmouth College ichnological collection.
Amer. Midl. Nat., X, 184-197.

Hitchcock, Edward 1821 A
Fossil fish found at Sunderland, Massachusetts.
Amer. Jour. Sci. (1), III, 366.
The species not identified.

—— 1823 A
Ichthyolites at Westfield, Ct., and at Sunderland, Mass.
Amer. Jour. Sci. (1), VI, 76-79, 3 figs. on plate.

—— 1844 A
Abstract in Quart. Jour. Geol. Soc., I, 141.

—— 1847 A
See Hay, O. P., 1902 A, p. 114. Abstract in Neues Jahrb. Min. Geogn. Geol., 1849, 244-246.

Hitchcock, E. jr. 1861 A
Fossil whale found in Charlotte, Vt.
Geology of Vermont, 1861, 164-165.
Extract from New York Times.

—— 1861 B
Report on the Geological Survey of Vermont, descriptive, theoretical, economical, and scenographical. In 2 volumes, vol. I, 156-191.
Descriptions of fossil whale and mammoth (from Z. Thompson) and of Champlain deposits.

Hobbs, William Herbert 1901 A
The Newark system of the Pomperaug Valley, Connecticut; with a report on fossil wood from the Newark formation of South Britain.
Rep. U. S. Geol. Surv., XXI, pt. 3, 1-162, pls. i-xvii, 59 text-figs.

Hodge, Edwin T. 1925 A
The earliest inhabitants of America.
Science (n.s.), LXII, July 31, Sci. Serv. Suppl., X.

Hodge, J. T. 1878 A
Report on the geology of Coshocton County.
Geol. Surv. Ohio, III, pt. 1, 562-595.

Hodgson, William B. 1846 A
Memoir on the *Megatherium* and other extinct gigantic quadrupeds of the coast of Georgia, with observations on its geologic features.
Pages 1-47, 1 pl., 2 maps. New York, 1846.
Besides the matter contributed by Hodgson, this memoir contains a "Memorandum" by Dr. Jos. Habersham (25-30) and "Observations" by J. Hamilton Couper (31-47).

Höfer, Hermann 1911 A
Das Kiefergelenk der Rodentier, nebst Bemerkungen über Unterkiefer und Bezahnung.
Jena. Zeitschr. Naturwiss., XLVII, 431-496, pls. xix-xxii, 6 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 53-56.

Hoek, P. P. C. 1909 A
On the age of salmon to be derived from the structure of the scales.
Proc. Akad. Wet. Amsterdam, XII, 485-502, pls. i, ii.
References to the literature are made in foot-notes.

—— 1910 A
Den leeftijd van den zalm afteleiden uit de structur der schubben. [The length of life of the salmon deduced from the structure of the scales.]
Versl. Wis. Nat. Afd. Akad. Wet., XVIII, pp. 432-450, with pls. i, ii.
The text is in Dutch.

Hoepen, E. C. N. 1915 A
Stegocephalia of Senekal, O. F. S.
Ann. Transvaal Mus., V, 124-149, pls. xvi-xxiv.
The bibliography contains 7 titles.
Reviewed in Neues Jahrb. Min. Geol. Pal., 1921, I, Rep., 228-229.

Hoernes, Rudolf 1886 A
Manuel de Paléontologie.
8vo., i-xvi+1-741 pages, 672 engravings in the text. Translated from the German by L. Dollo.
Pages 524-672 are devoted to the Vertebrata.

—— 1912 A
Das Aussterben der Gattungen und Arten.
Verh. internat. Zool.-Kongr., VIII, Graz, 1910, 650-664.

Hoeven, Janus van der 1822 A
De sceleto piscium.
8vo., Lugduni Batavorum, apud Herdingh et filium, 1822, 1-112.

Hoeven, Janus van der—Cont'd 1866 A
Notes on the genus *Menobranchus* and its natural affinities.
Ann. Mag. Nat. Hist. (3), XVIII, 363-375. Extracted from Archives Nederland, I, 305-321.

Hoever, Robert 1911 A
Zur Entstehung des Tuberculum articulare beim Menschen.
Morphol. Jahrb., XLIV, 81-100, 1 text-fig., pls. i-iii.

Hofer, Bruno 1890 A
Ueber den Bau und die Entwicklung der Cycloid-und Ctenoidschuppen.
Sitz.-Ber. Ges. Morphol., Physiol., München, VI, 103-118.

Hoffmann, C. K. 1878 B
Amphibien.
Bronn's Klassen und Ordnungen des Thierreichs; VI, 2te Abth., 88-726, pls. XV-LII.
Pages 1-88 of this work are included under Hoffman, C. K., 1874 A. The book was issued in parts from 1873-1878.

—— 1879 B
Over het voorkomen van halbsribben bij de schildpadden.
Versl. Med. Akad. Amsterdam (2), XIV, 52-65, with pl.

—— 1890 B
Eidechsen und Wassereidechsen (Saurii und Hydrosaurii).
Bronn's "Klassen und Ordnungen des Thierreichs," VI, Abth. III, 443-1399, pls. XLIX-CVII.

Hoffmann, G. Christian 1902 A
Report on the section of chemistry and mineralogy.
Rep. Geol. Surv. Canada, XII, 1899 (1902), R, 11-64.

Hoffmann, Guido 1909 A
Asterolepis rhenanus (*Pterichthys rhenanus* Beyrich, Traquair, Smith Woodward).
Centralbl. Min. Geol. Pal., 1909, 491-495, 3 text-figs.

—— 1911 A
Ueber das Ruderorgan der Asterolepiden.
Palaeontogr., LVII, 286-312, pls. XXIV-XXVI, 26 text-figs.
58 papers are quoted in the bibliography.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 480; Geol. Centralbl., XVII, 706.

—— 1916 A
Heilungsvorgänge an devonischen Panzerfischen.
Centralbl. Min. Geol. Pal., 1916, 491-495, 4 figs.
Abstract in Geol. Zentralbl., XXIII, 316.

Hoffmann, K. 1923 A
Der Maxillar- und Bartelapparat bei *Silurus glanis.*
Anat. Anz., LVII, 113-122, 3 figs.
There are 9 titles in the bibliography.

Hoffmann, Ludwig 1912 A
Zur Kenntniss des Neurocraniums der Pristiden und Pristiophoriden.
Zool. Jahrb. Anat., XXXIII, 239-360, pls. XIII-XXIV, 8 text-figs.
Appended is a bibliography of 65 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 72-76.

Hoffmann, Ralph 1927 A
The finding of Pleistocene material in an asphalt pit at Carpinteria, California.
Science (n.s.), LXVI, 155.

Hofmann, Kleophas 1923 A
Das Hyobranchialskelet von *Salamandra maculosa,* nebst Beiträgen zur Rückbildung des Kieferapparates.
Anat. Anz., LVI, 432-441, 4 figs.
The bibliography presents 10 titles.

Hofmann, Ottmar 1905 A
Das Munddach der Saurier.
Morphol. Jahrb., XXXIII, 3-38, pl. I, 9 text-figs.

Hogben, Lancelot T. 1919 A
The progressive reduction of the jugal in the Mammalia.
Proc. Zool. Soc. Lond., 1919, 71-78.

Hogg, John 1839 A
On the classification of the Amphibia.
Mag. Nat. Hist., III, 265-274; 367-378.

—— 1841 A
On the existence of branchiæ in the young Cæciliæ and on a modification and extension of the branchial classification of the Amphibia.
Ann. Nat. Hist., VII, 353-363.

Holden, F. Harvey 1917 A
Osteological relationships of three species of beavers.
Univ. Calif. Publ. Zool., XVII, 75-114, pls. V-XII, 18 text-figs.
The three species described are *Castor canadensis, C. fiber* and *C. subauratus.*

Holding, R. E. 1905 A
Remarks upon a series of the first-year antlers of certain deer.
Proc. Zool. Soc. Lond., 1905, II, 1-3, figs. A-E.

Holl, M. 1882 A

Ueber die richtige Deutung der Querforsätze der Lendenwirbel und die Entwicklung der Wirbelsäule der Menschen.

Sitz-Ber. Akad. Wiss. Wien, LXXX, 181-232, pls. i-iv.

Holland, W. J. 1899 A

The mastodon.

Pop. Sci., XXXIII, 233-234, 3 figs.

—— 1904 A

In memoriam. John Bell Hatcher.

Ann. Carnegie Mus., II, 597-604, pls. xvi-xx.

—— 1905 A

A new crocodile from the Jurassic of Wyoming.

Ann. Carnegie Mus., III, 431-434, pl. xvi, 1 text-fig.

Abstracts in Geol. Centralbl., VIII, 379; X, 371; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 466.

—— 1905 B

The presentation of a reproduction of *Diplodocus carnegiei* to the trustees of the British Museum.

Ann. Carnegie Mus., III, 443-452, plate xvii.

—— 1905 C

The hyoid bone in *Mastodon americanus*.

Ann. Carnegie Mus., Pittsburgh, III, 464-467, 5 text-figs.

Abstract in Geol. Centralbl., VIII, 375.

—— 1905 D

Discovery of the skeleton of *Diplodocus carnegii* Hatcher.

Science (n.s.), XXI, 935.

—— 1905 E

The story of the *Diplodocus*.

Westminster Review, CLXIII, 683-692, with plate.

—— 1906 A

The osteology of *Diplodocus* Marsh.

Mem. Carnegie Mus., II, 225-264, pls. xxiii-xxx, 30 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 446; Geol. Centralbl., XI, 331; Nature, LXXIII, 541; Rev. crit. Paléozool., X, 141-142; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 163; Sci. Progress, I, 455.

—— 1908 A

A preliminary account of the Pleistocene fauna discovered in a cave opened at Frankstown, Pennsylvania, in April and May 1907.

Ann. Carnegie Mus., IV, 228-233.

Abstracts in Geol. Centralbl., XIII, 291; Rev. crit. Paléozool., XII, 233.

Holland, W. J.—Continued 1908 B

Editorial notes.

Ann. Carnegie Mus., IV, 159-161.

—— 1908 C

An undetermined element in the osteology of the Mosasauridæ.

Ann. Carnegie Mus., IV, 162-167, 5 text-figs.

Abstracts in Geol. Centralbl., XII, 598; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 467.

—— 1908 D

Baptanodon not a "toothless" ichthyosaur.

Science (n.s.), XXVII, 191-192.

—— 1908 E

Dr. O. P. Hay on the skull of *Diplodocus*.

Science (n.s.), XXVIII, 644-645.

—— 1908 F

A new species of the genus *Moropus*.

Science (n.s.), XXVIII, 809-810, 1 text-fig.

Abstract in Rev. crit. Paléozool., 13, 80.

—— 1909 A

Editorial notes.

Ann. Carnegie Mus., V, 453-456.

—— 1909 B

Deinosuchus hatcheri, a new genus and species of crocodile from the Judith River beds of Montana.

Ann. Carnegie Mus., VI, 281-294, 16 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 145; Sci. Progress, IV, 668.

—— 1910 A

A review of some recent criticisms of the restorations of sauropod dinosaurs existing in the museums of the United States, with special reference to that of *Diplodocus carnegiei* in the Carnegie Museum.

Amer. Naturalist, XLIV, 259-283, pl. i, 20 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref. 323; Geol. Zentralbl., XVI, 216-217; Sci. Progress, V, 678-679; Rev. crit. Paléozool., XV, 23; Nature, LXXXIII, 381.

—— 1910 B

Note on *Diplomystus dentatus*.

Ann. Carnegie Mus., VII, 24, pl. vi.

—— 1911 A

Note on the finding of remains of dinosaurs.

Ann. Carnegie Mus., VIII, 2.

Holland, W. J.—Continued 1912 A

Symposium on ten years progress in vertebrate paleontology. Jurassic dinosaurs.

Bull. Geol. Soc. Amer., XXIII, 204-207.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

—— 1912 B

A preliminary account of the Pleistocene fauna discovered in a cave opened at Frankstown, Pennsylvania, in April and May 1907.

Proc. internat. Zool. Congr., VII, Boston, 1907, 748-752.

—— 1914 A

[Remarks on zygomatic arches of *Promerycochœrus*.]

Ann. Carnegie Mus., IX, 197.

—— 1915 A

A skull of *Bison crassicornis*.

Ann. Carnegie Mus., IX, 225, pl. xliii.

This specimen appears to belong to *Bison occidentalis*.

Abstract in Geol. Zentralbl., XXIX, 157.

—— 1915 B

Heads and tails; a few notes relating to the structure of the sauropod dinosaurs.

Ann. Carnegie Mus., IX, 273-278, pl. lix.

Abstract in Geol. Zentralbl., XXIX, 189.

—— 1915 C

Heads and tails; a few notes relating to sauropod dinosaurs.

Bull. Geol. Soc. Amer., XXVI, 153 (abstract).

—— 1916 A

A new species of *Apatosaurus*.

Ann. Carnegie Mus., X, 143-145.

Abstract in Geol. Zentralbl., XXIX, 187.

—— 1916 B

Notice of the death of William H. Reed.

Ann. Carnegie Mus., X, 2-3.

—— 1916 C

[Note on the discovery of a skull of *Diplodocus*.]

Ann. Carnegie Mus., X, 3.

—— 1916 D

Skeletons of *Diplodocus* and *Apatosaurus* in the Carnegie Museum (abstract).

Bull. Geol. Soc. Amer., XXVII, 153.

Holland, W. J.—Continued 1918 A

Some observations on the osteology of *Diplodocus*.

Bull. Geol. Soc. Amer., XXIX, 130 (abstract).

—— 1919 A

Report on section of paleontology.

Rep. Carnegie Mus., for year 1919, 37-39.

—— 1923 A

The vertebral formula in the Sauropoda.

Amer. Naturalist, LVII, 477-480.

—— 1924 A

Description of the type of *Uintasaurus douglassi* Holland.

Ann. Carnegie Mus., XV, 119-138, pls. x-xiv, 7 text-figs.

—— 1924 B

The skull of *Diplodocus*.

Mem. Carnegie Mus., IX, 379-403, pls. xl-xliii, 11 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, 294.

——, and O. A. **Peterson** 1913 A

The osteology of the Chalicotheroidea; with special reference to a mounted skeleton of *Moropus elatus* Marsh, now installed in the Carnegie Museum.

Mem. Carnegie Mus., III, 189-406, pls. xlviii-lxxvii, 115 text-figs.

Reviewed in Science (n.s.), XL, 1914, 209-210; Jour. Geol., XXII, 818.

Hollard, Henri 1850 A

Coup d'oeil sur l'ordre des Ganoides et recherches sur les caractères des Lophobranches, pour déterminer leurs véritables affinitiés zoologiques.

C. R. Acad. Sci. Paris, XXXI, 564-566.

—— 1857 B

Monographie de la famille des ostracionides.

Ann. Sci. Nat. (4), VII, 121-170, pl. xiii.

—— 1863 A

De la signification anatomique de l'appareil operculaire des poissons et de quelques autres parties de leur système osseux.

C. R. Acad. Sci. Paris, LVI, 38-39.

—— 1863 B

De la distribution des pièces qui composent l'arc suspenseur de la mâchoire inférieure chez les poissons osseux, et de leur signification anatomique.

C. R. Acad. Sci., Paris, LVI, 633-634.

Hollard, Henri—Continued 1864 A

Recherches sur la signification homologique de quelques pièces faciales des poissons osseux.

Ann. Sci. nat. (5), I, 5-19, pl. i.

—— 1864 B

De la signification anatomique de l'appareil operculaire des poissons.

Ann. Sci. nat. (5), I, 241-256, pl. x.

—— 1864 C

Du temporal et des pièces qui en représentent les éléments dans la série des animaux vertébrés.

Ann. Sci. nat. (5), I, 359-376, pl. xiii.

Hollick, Arthur 1901 A

Discovery of a mastodon's tooth and the remains of a boreal vegetation in a swamp on Staten Island, N. Y.

Ann. N. Y. Acad. Sci., XIV, 67-68.

Holliger, Charles Daniel 1916 A

Anatomical adaptions in the thoracic limb of the California pocket gopher and other rodents.

Univ. Calif. Publ. Zool., XIII, 447-494, pls. xxxviii-xxxix, 20 text-figs.

The bibliography presents 31 titles.

Hollister, Ned 1911 A

A systematic synopsis of the muskrats.

N. A. Fauna, No. 32, 1-38, pls. i-vi.

Abstract in Nature, LXXXVII, 18.

—— 1911 B

Remarks on the long-tailed shrews of the eastern United States, with description of a new species.

Proc. U. S. Nat. Mus., XL, 377-381.

—— 1911 C

The generic name of the muskrat.

Proc. Biol. Soc. Wash., XXIV, 13-14.

Accepts the name *Ondatra*.

—— 1912 A

New mammals from Canada, Alaska and Kamchatka.

Smithson. Misc. Coll., LVI, No. 35, 1-8, pls. i-iii.

Presents measurements of skulls and teeth of several species.

—— 1913 A

A synopsis of the American minks.

Proc. U. S. Nat. Mus., XLIV, 471-480.

—— 1915 A

The genera and subgenera of raccoons and their allies.

Proc. U. S. Nat. Mus., XLIX, 143-150, pls. xxxviii, xxxix.

Hollister, Ned—Continued 1916 A

'A systematic account of the prairie-dogs.

N. A. Fauna No. 40, 1-37, pls. i-vi, 2 text-figs.

—— 1922 A

Recent literature.

Jour. Mamm., III, 270-273.

Holmes, Francis S. 1856 A

Contributions to the natural history of the American devil-fish, with descriptions of a new genus from the harbour of Charleston, South Carolina.

Proc. Elliott Soc. Nat. Hist., 1856, 39-46, pl. iii.

—— 1860 A

Post-pleiocene fossils of South Carolina.

4to., i-xii+i-vi+1-122 pages, pls. i-xxviii.

Parts 1-5 (pp. 1-64) were published in 1858; parts 6-10 (pp. 68-98), in 1859; parts 11-15 (pp. 99-122), in 1860. Pages i-xii are occupied by an "Introduction" by F. S. Holmes; pages 99-122, pls. xv-xviii, by Joseph Leidy's "Description of vertebrate fossils."

—— 1870 A

Phosphate rocks of South Carolina and the "Great Carolina marl bed."

Charleston. 8vo., pages 1-87, with 5 pls.

Holmes, William Henry 1901 A

Review of the evidence relating to auriferous gravel man in California.

Rep. Smithson. Instn. for 1899, 419-472, pls. i-xvi, 5 text-figs.

—— 1902 A

Anthropological studies in California.

Rep. U. S. Nat. Mus. for 1900, 155-185, 50 plates.

—— 1903 A

Flint implements and fossil remains from a sulphur spring at Afton, Indian Territory.

Rep. U. S. Nat. Mus. for 1901, 237-252, pls. i-xxvi.

This paper, in practically the same form, was published in 1902 in the American Anthropologist, IV, 108-128, pls. xi, xii, 1 text-fig.

Abstract in Globus, LXXXI, 1902, 101-102.

—— 1903 B

Fossil human remains found near Lansing, Kansas.

Rep. Smithson. Instn. for 1902, 455-462, pls. i-iii, 2 text-figs.

—— 1918 A

On the antiquity of man in America.

Science (n.s.), XLVII, 561-562.

Holmes, William Henry—Cont'd 1925 A

The antiquity phantom in American archæology.

Science (n.s.), LXII, 256-258.

Holzinger, John M. 1885 A

Fossil elephant in Winona County [Minnesota].

Rep. Geol. Nat. Hist. Surv. Minn., XIII, 147.

Letter to Prof. N. H. Winchell.

Hommes, J. H. 1924 A

On the development of the clavicula and the sternum in birds and mammals.

Tijdschr. Nederl. Dierk. Vereen. (2), XIX, Afl. 1, 10-51, pls. i-iii.

The bibliography occupies pages 43-46.

Honeyman, David 1888 A

Nova Scotian superficial geology.

Proc. Nova Scot. Inst., VII, 131-141.

—— 1890 A

Glacial geology of Cape Breton.

Proc. Nova Scot. Inst., VII, 337-344.

Honigmann, Hans Leo 1913 A

Bemerkungen zur Synonymie und Systematik der Leporiden und Beschriebung eines neuen chinesischen Kaninchens.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1913, 293-297.

Appended is a bibliography of 13 titles.

—— 1915 A

Das Primordialkranium von *Megaptera nodosa* Bonnat.

Anat. Anz., XLVIII, 113-127, 3 figs.

Hooley, Reginald Walter 1907 A

On the skull and greater portion of the skeleton of *Goniopholis crassidens* from the Wealden shales of Atherfield (Isle of Wight).

Quart. Jour. Geol. Soc., LXIII, 50-63, pls. ii-iv.

Noted by Lydekker, Sci. Progress, II, 516; by Huene, Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 466; by Sauvage in Rev. crit. Paléozool., XI, 75.

—— 1912 A

On the discovery of remains of *Iguanodon mantelli* in the Wealden beds of Brighstone Bay, Isle of Wight.

Geol. Mag. (5), IX, 444-449.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 266.

Hooley, R. W.—Continued 1913 A

On the skeleton of *Ornithodesmus latidens;* an ornithosaur from the Wealden shales of Atherfield (Isle of Wight).

Quart. Jour. Geol. Soc., LXIX, 372-422, pls. xxxvi-xl.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 403-405. Abstracts in Sci. Progress, VIII, 638-639; Jour. Geol. XXI, 754-756; Geol. Mag. (5), X, 570.

—— 1914 A

On the ornithosaurian genus *Ornithocheirus*, with a review of the specimens from the Cambridge greensand in the Sedgwick Museum, Cambridge.

Ann. Mag. Nat. Hist. (8), XIII, 530-557, pl. xxii.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 405-406.

—— 1917 A

Integument of *Iguanodon bernissartensis* and *Morosaurus becklesii.*

Geol. Mag. (6), IV, 148-150, pl. x.

—— 1925 A

On the skeleton of *Iguanodon atherfieldensis* sp. nov.

Quart. Jour. Geol. Soc., LXXXI, 1-60, pls. i, ii, 10 text-figs.

References to the literature in foot-notes.

Hopewell-Smith, A., and H. W. Marett **Tims** 1911 A

Tooth-germs in the wallaby, *Macropus billardieri.*

Proc. Zool. Soc. Lond., 1911, 926-942, pl. xlvii, text-figs. 181-189.

Hopkins, F. V. 1870 A

First Annual Report of the Louisiana Geological Survey, 1869.

Rep. Louisiana Sem., I, 1870, 77-109.

—— 1871 A

Second annual Report of the Geological Survey of Louisiana to the General Assembly.

Rep. Louisiana Univ., II, 1870, 1-35.

—— 1872 A

Third Annual Report of the Louisiana Geological Survey.

Rep. Lousiana Univ., III. 163-206.

Hoppe, Richard 1894 A

Untersuchungen über den Kauapparat des Cyprinoiden *Leuciscus rutilus.*

Inaugural dissertation, Leipzig, pages 1-36, 1 pl.

The bibliography presents titles of 28 works.

Hora, Sunder Lal 1922 A
The homology of the weberian ossicles.
Jour. Asiat. Soc. Bengal (n.s.), XVIII, 1-4, with 2 figs.

Hornaday, William T. 1889 A
The extermination of the American bison, with a sketch of its discovery and life history.
Rep. U. S. Nat. Mus., 1886-87, 369-548, pls. i-xxii, and a large map showing distribution and stages of extermination.

—— 1901 A
Notes on the mountain sheep of North America, with a description of a new species.
Rep. N. Y. Zool. Soc., V, 77-122, with 17 illustrations and a map of distribution.

—— 1911 A
The musk-ox in Alaska.
Bull. N. Y. Zool. Soc., XLV, 754.

Houssay, Frederic 1909 A
Carènes et poissons. Stabilisation par les nageoires.
Rev. gen. Sci. Paris, XX, 617-624.

—— 1909 B
Nouvelles expériences sur la forme et la stabilité des poissons.
Rev. gen. Sci. Paris, XX, 943-948, 6 text-figs.

—— 1909 C
Sur les conditions hydrodynamiques de la forme chez les poissons.
C. R. Acad. Sci. Paris, CXLVIII, 1076-1078.

—— 1910 A
L'asymétrie du crâne chez les Cétacés et ses rapports avec la loi de l'action et de la réaction.
Anat. Anz., XXXVI, 12-17, 1 text-fig.

——, and A. **Magnan** 1912 A
L'envergure et la queue chez les oiseaux.
C. R. Acad. Sci. Paris, CLIV, 39-41, 1 fig.

Hovey, E. O. 1908 A
The Chester, New York, mastodon.
Ann. N. Y. Acad. Sci., XVIII, 147, pl. v.
Presents a facsimile of a note and a drawing made by Dr. P. S. Townsend, in 1817, on a mastodon found at Chester, New York.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 129; Rev. crit. Paléozool., XII, 274.

Hovey, Horace C. 1891 A
The latest facts about the megalonyx.
Scient. Amer., LXV, 161.

Hovey, Horace C.—Continued 1900 B
Facts about the megalonyx.
Scient. Amer. Suppl., L, 20839.

Howard, Hildgarde 1927 A
A review of the fossil bird *Parapavo californicus* (Miller), from the Pleistocene asphalt beds of Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., XVII, 1-30, pls. i-xiii.

Howell, Alfred Brazier 1924 A
Individual and age variations in *Microtus montanus yosemite*.
Jour. Agric. Res., XXVIII, 977-1016, pl. i, 25 text-figs.

—— 1926 A
The anatomy of the wood rat. Comparative anatomy of the subgenera of the American wood rat (genus *Neotoma*).
8vo., i-x+1-225 pages, 37 figs.
The bibliography contains 37 titles.
Pages 110-172 are devoted to the osteology.

—— 1927 A
Contribution to the anatomy of the Chinese finless porpoise *Neomeris phocænoides*.
Proc. U. S. Nat. Mus., LXX, art. 13, 1-43, 14 figs.
There is a bibliography of 15 titles.

Howell, Arthur Holmes 1901 A
Revision of the skunks of the genus *Chincha*.
N. A. Fauna No. XX, 1-62, pls. i-viii.
The writer adopted *Chincha* in place of *Mephitis* for the skunks here described.

—— 1902 A
The generic names of the North American skunks.
Proc. Biol. Soc. Wash., XV, 1-9, pl. i.
The author adopted the name *Chinca*, to replace *Mephitis*.

—— 1906 A
Revision of the skunks of the genus *Spilogale*.
N. A. Fauna No. XXVI, 1-55, pls. i-x.

—— 1914 A
Revision of the American harvest mice (Genus *Reithrodontomys*).
N. A. Fauna No. XXXVI, 1-97, pls. i-vii, 6 text-figs.

—— 1915 A
Revision of the American marmots.
N. A. Fauna No. XXXVII, 1-80, pls. i-XV, 3 text-figs.

Howell, Arthur Holmes—Cont'd 1918 A
Revision of the American flying squirrels.
N. A. Fauna, No. XLIV, 1-64, pls. i-vii, 4 text-figs.

—— 1924 A
Revision of the American pikas (Genus *Ochotona*).
N. A. Fauna, No. XLVII, 1-57, 6 pls., 4 text-figs.

Howell, B. F. 1926 A
Problematical fossil, possibly a fish plate, from the Cambrian *Paradoxides* beds of northern Vermont.
Bull. Geol. Soc. Amer., XXXVII, 236 (Abstract).

Howes, G. B. 1891 A
On the probable existence of a Jacobson's organ among the Crocodilia, with observations upon the skeleton of that organ in the Mammalia, and upon the basi-mandibular elements in the Vertebrata.
Proc. Zool. Soc. Lond., 1891, 148-159, pl. xiv.

—— 1893 B
Notes on the variation and development of the vertebral column and limb-skeleton of the Amphibia.
Proc. Zool. Soc. Lond., 1893, 268-278, 15 text-figs.

—— 1893 C
On the coracoid of the terrestrial Vertebrata.
Proc. Zool. Soc. Lond., 1893, 585-592, 2 text-figs.

—— 1894 A
The present outlook of vertebrate morphology.
Sci. Progress, I, 73-90.
The literature referred to occupies pages 89-90.

—— 1895 A
Skull of a rabbit destitute of the second pair of upper incisors.
Proc. Zool. Soc. Lond., 1895, 521-522.

—— 1895 B
On the mammalian hyoid.
Rep. Brit. Assoc. Adv. Sci., LXV, Ipswich, 1895, 736. (A brief abstract.)

—— 1902 A
The morphological method and progress.
Nature, LXVI, 522-530.
Also in Rep. Brit. Assc. Adv. Sci., LXXII, Belfast, 1902 (1903), 618-638.

Howes, G. B.—Continued 1903 A
The brain of the Archæoceti.
Proc. Roy. Soc. Lond., LXXI, 322-330, 4 figs.

—— and J. **Harrison** 1893 A
On the skeleton and teeth of the Australian dugong.
Rep. Brit. Assoc. Adv. Sci., LXII, Edinburg, 790.

—— and H. H. **Swinnerton** 1901 A
On the development of the skeleton of the tuatara, *Sphenodon punctatus*, with remarks on the egg, on the hatching, and on the hatched young.
Trans. Zool. Soc. Lond., XVI, 1-86, pls. i-vi, 18 text-figs.
There is appended a bibliography of 68 titles.

Howorth, Henry Hoyle 1878 A
On the extinction of the mammoth in Siberia.
Nature, XVIII, 483.

—— 1887 A
The mammoth and the flood; an attempt to confront the theory of uniformity with the facts of recent geology.
8vo., London, i-xxxii+1-464 pages.
For critique see Nature, XXXVII, 1887, 123-125; Replies by Howorth in same volume, 200-201, 295.

—— 1893 B
Notes on the occurrence of mammoth-remains in the Yukon district of Canada and in Alaska.
Nature, XLIX, 94.

—— 1905 A
Ice or water. Another appeal to induction from the scholastic methods of modern geology. In three volumes.
Vol. I, i-lvi+1-536 pages. Vol. II, i-viii+1-498 pages.
Only two volumes have been published.

Hoyer, H., and J. **Babik** 1924 A
Über Zähne von Säugetieren mit an der Krone offenen Pulpahöhlen.
Bull. Acad. Sci. Cracovie, 1924 (1925), 445-460, pl. xxxiii.
The bibliography comprises 13 titles.

Hrdlička, Aleš 1903 A
Divisions of the parietal bone in man and other mammals.
Bull. Amer. Mus. Nat. Hist., XIX, 231-386.
The bibliography presents 74 titles.

Hrdlička, Aleš—Continued 1907 A

Skeletal remains suggesting or attributed to early man in North America.

Bur. Amer. Ethnol. Bull., XXXIII, 1-113, pls. i-xxi, 16 text-figs.

Contains mention of some extinct mammals.

—— 1916 A

Preliminary report on finds of supposedly ancient human remains at Vero, Florida.

Jour. Geol., XXV, 43-51, 2 text-figs.

Reprints of this paper were distributed a few days before Jan. 1, 1917.

—— 1918 A

Recent discoveries attributed to early man in America.

Bur. Amer. Ethnol. Bull., LXVI, 1-67, pls. i-xiv, 8 text-figs.

Contains lists of fossil vertebrates found at Vero, Florida, taken from Sellard's papers.

—— 1920 A

Shovel-shaped teeth.

Amer. Jour. Phys. Anthrop., III, 429-465, 6 pls.

—— 1921 A

Further studies of tooth morphology.

Amer. Jour. Phys. Anthrop., IV, 141-176, 6 pls.

—— 1924 A

New data on the teeth of early man and certain fossil European apes.

Amer. Jour. Phys. Anthrop., VII, 109-132, 1 pl.

—— 1926 A

The race and the antiquity of the American Indian.

Scient. Amer., July, 1926, 7-9, 6 ills.

Huard, V. A. 1908 A

Capture d'un morse.

Naturaliste canad., XXXV, 49-51.

Hubbard, Bela 1841 A

Report of B. Hubbard, Assistant Geologist.

Rep. State Geologist Mich., IV.

Also in documents accompanying the journal of the House of Representatives of the State of Michigan at the annual session of 1841, vol. I, 552-578.

Hubbard, O. P. 1885 A

[Mastodon at Bristol, Conn.]

Trans. N. Y. Acad. Sci., V, 14-15. (The bare statement.)

—— 1887 A

Skeleton of whale found near Quebec.

Amer. Jour. Sci. (3), XXXIII, 242.

A reference to "Kalm's Travels in N. A."

Hubbs, Carl L. 1919 A

The Amphibioidei, a group of fishes proposed to include the Crossopterygii and the Dipneusti.

Science (n.s.), XLIX, 569-570.

—— 1919 B

A comparative study of the bones forming the opercular series of fishes.

Jour. Morphol., XXXIII, 61-71.

—— 1922 A

Variations in the number of vertebræ and other meristic characters of fishes correlated with the temperature of water during development.

Amer. Naturalist, LVI, 360-372, 7 figs.

14 titles are presented in the bibliography.

—— 1923 A

Seasonal variation in the number of vertebræ of fishes.

Pap. Mich. Acad. Sci. Arts, II, 207-214, 1 fig.

—— 1924 A

Recent contributions to our knowledge of the fossil fishes of California.

Science (n.s.), LX, 177-179.

A bibliography of 12 titles.

—— 1926 A

The structural consequences of modifications of the developmental rate in fishes, considered in reference to certain problems of evolution.

Amer. Naturalist, LX, 57-81.

The bibliography contains 68 titles.

Huber, Oscar 1901 A

Die Kopulationsglieder der Selachier.

Zeitschr. wiss. Zool., LXX, 593-674, pls. xxvii, xxviii, 12 text-figs.

The bibliography embraces 26 titles.

Hubrecht, A. A. W. 1897 A

The descent of the Primates.

New York, Charles Scribner's Sons, 1897, pages 1-41, with 7 figs.

—— 1908 A

Early ontogenetic phenomena in mammals and their bearing on our interpretation of the phylogeny of the vertebrates.

Quart. Jour. Micr. Sci. (n.s.), LIII, 1-181, 160 illustrations.

Pages 171-181 are occupied by the extensive bibliography.

Abstract in Nature, LXXIX, 228.

Hue, Edmond 1907 A

Musée ostéologique. Étude de la faune quaternaire. Ostéometrie des mammifères.

8vo., i-xix+1-50 pages, 186 plates containing 2187 figures.

Abstract in Geol. Centralbl., XI, 171.

Huene, Friedrich 1900 A

Devonische Fischreste aus der Eifel.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd. I, 64-66, 2 text-figs.

—— 1901 A

Der vermuthliche Hautpanzer des *Compsognathus longipes* Wagn.

Neues Jahrb. Min. Geol. Pal., I, 157-160, pl. vii, 1 text-fig.

Abstract in Geol. Centralbl., III, 442, 1903.

—— 1901 B

Vorläufiger Bericht über die trias sischen Dinosaurier des europäischen Continents.

Neues Jahrb. Min. Geol. Pal., II, 89-104, pls. iii, iv, 6 text-figs.

—— 1902 A

Uebersicht über die Reptilien der Trias.

Geol. Pal. Abh. Jena. (N.F.), VI, pp. 1-84, pls. i-ix, 78 text-figs.

Abstracts in Geol. Centralbl., V, 724; Rev. crit. Paléozool., VII, 80-82; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 92.

—— 1903 A

Abstract of F. Bauer: Osteologische Notizen über Ichthyosaurier (Bauer, F., 1900 A).

Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 441-442.

—— 1905 A

Pelycosaurier im deutschen Muschelkalk.

Neues Jahrb. Min., Geol. Pal., Beil.-Bd. XX, 321-353, pls. v-vii, 47 text-figs.

Abstracts in Geol. Centralbl., VIII, 697-698; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 165.

—— 1905 B

Über die Trias-Dinosaurier Europas.

Zeitschr. deutsch. Geol. Ges., LVII, Monatsb., 345-349.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 159.

—— 1906 A

Ueber das Hinterhaupt von *Megalosaurus bucklandi* aus Stonesfield.

Neues Jahrb. Min. Geol. Pal., 1906, I, 1-12, pl. i, 4 text-figs.

Abstracts in Geol. Centralbl., XV, 722; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 162.

Huene, Friedrich—Continued 1906 B

Ueber die Dinosaurier der aussereuropäischen Trias.

Geol. Pal., Abh. Jena, (N.F.), VIII (XII); 97-156, pls. viii-xxiii (Heft 2, 1-60, pls. i-xvi), 102 text-figs.

The bibliography includes 37 titles.

Abstracts in Geol. Centralbl., XII, 150-151; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 295; Rev. crit. Paléozool., XII, 273; Amer. Jour. Sci. (4), XXV, 86-87.

—— 1906 C

Ueber die Foramina der Carotis interna und des Hypoglossus bei einigen Reptilien.

Centralbl. Min. Geol. Pal., 336-338.

Abstract in Geol. Centralbl., VIII, 697.

—— 1907 A

Skeletsystem. Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 150-167.

The bibliography (pages 150-157) presents 148 titles.

—— 1908 A

Neue and verkannte Pelycosaurier-Reste aus Europa.

Centralbl. Min. Geol. Pal., 1908, 431-434.

Abstract in Geol. Centralbl., XII, 151.

—— 1908 B

Die Dinosaurier der europäischen Triasformation mit Berücksichtigung der aussereuropäischen Vorkommnisse.

Geol. Pal. Abh., Jena, Suppl.-Band I, i-xii+1-419 pages, atlas of 111 pls., 351 text-figs.

Pages 1-64 of this work were issued in 1907. Pages 409-418 are occupied by a bibliography of the Dinosauria.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 286-292; Rev. crit. Paléozool., XV, 205-206; Geol. Zentralbl., XII, 222; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 160; Sci. Progress, II, 514; III, 459.

—— 1908 C

On the age of the reptile faunas contained in the Magnesian conglomerate at Bristol and in the Elgin Sandstone.

Geol. Mag. (5), V, 99-100.

—— 1908 D

Zur Beurteilung der Sauropoden.

Zeitschr. deutsch. Geol. Ges., LX, Monatsb., 294-297.

Abstracts in Geol. Centralbl., XIV, 57; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 295.

Huene, Friedrich—Continued 1908 E

Ein Beitrag zur Beurteilung der Sacralrippen.

Anat. Anz., XXXIII, 378-381.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 296; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 94.

—— 1908 F

Beiträge zur Lösung der Praepubisfrage bei Dinosaurien und anderen Reptilien.

Anat. Anz., XXXIII, 401-405.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 297; Sci. Progress, V, 680; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 120.

—— 1908 G

On phytosaurian remains from the Magnesian conglomerate of Bristol (*Rileya platyodon*).

Ann. Mag. Nat. Hist. (8), I, 228-230.

Abstract in Geol. Centralbl., XI, 473, 604.

—— 1908 H

Skeletsystem. Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 156-175.

On pages 156-175 are listed the titles of papers cited.

—— 1909 A

Review of Ch. W. Gilmore: The mounted skeleton of *Triceratops prorsus*.

Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 131.

—— 1909 B

Skizze zu einer Systematik und Stammesgeschichte der Dinosaurier.

Centralbl. Min. Geol. Pal., 1909, 12-22.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 158.

—— 1909 C

Ein primitiver Dinosaurier aus der mittleren Trias von Elgin.

Geol. Pal. Abh. Jena. (N.F.), VIII (XII), 317-322, pl. 1 (xliii), 2 text-figs.

Brief note on, in Neues Jahrb. Min. Geol. Pal., 1911, I, 145.

Abstract in Sci. Progress, V, 681.

—— 1909 D

Neubeschreibung des permischen Stegocephalen *Dasyceps bucklandi* (Lloyd) aus Kenilworth.

Geol. Pal. Abh. Jena (N.F.), VIII (XII), 323-328, pls. i, ii (xliv, xlv), 14 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 471.

Huene, Friedrich—Continued 1909 E

Review of B. Brown: The Ancylosauridæ, a new family of armored dinosaurs from the Upper Cretaceous (Brown, B., 1908 B).

Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 440-441.

—— 1909 F

Vorläufige Mitteilung über einen neuen *Phytosaurus* Schädel aus dem Schwäbischen Keuper.

Centralbl. Min. Geol. Pal., 1909, 583-592, 7 figs.

Abstract in Sci. Progress, V, 683.

—— 1910 A

Über den ältesten Rest von *Omosaurus* (*Dacentrurus*) im englischen Dogger.

Neues Jahrb. Min. Geol. Pal., 1910, I, 75-78, pl. vii, 1 text-fig.

—— 1910 B

Über einen echten Rhynchocephalen aus der Trias von Elgin, *Brachyrhinodon taylori*.

Neues Jahrb. Min. Geol. Pal., 1910, II, 29-62, 28 text-figs.

Abstract in Sci. Progress, V, 683.

—— 1910 C

Review of O. P. Hay: Descriptions of two new genera and two new species of fossil turtles (Hay, O. P., 1906 B).

Neues Jahrb. Min. Geol. Pal., 1910, II, 302.

—— 1910 D

Ein ganzes *Tylosaurus*-Skelett.

Geol. Pal. Abh., Jena (N.F.), VIII (XII), 297-314, pls. xli, xlii (Heft VI, 1-22, pls. i, ii), 18 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 146; Geol. Centralbl., XV, 126-127; Sci. Progress, V, 684; Rev. crit. Paléozool., XV, 208.

—— 1910 E

Ein primitiver Dinosaurier aus der mittleren Trias von Elgin.

Geol. Pal. Abh., Jena (N.F.), VIII (XII), 315-322, pls. xlii (Heft VI, 1-30, pl. i), 2 text-figs.).

Abstract in Geol. Centralbl., XV, 62-63.

—— 1910 F

Skeletsystem. Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 147-163.

On pages 147-156 are listed 205 titles, abstracts of many of which are furnished on succeeding pages.

Huene, Friedrich—Continued 1911 A

Kurze Mitteilung über Perm, Trias und Jura in New Mexico.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd. XXXII, 730-739, pl. XXXII, 2 text-figs.

—— 1911 B

Über einen *Platecarpus* in Tübingen.

Neues Jahrb. Min. Geol. Pal., 1911, II, 48-50, pl. III.

Abstracts in Geol. Centralbl., XVII, 335; Sci. Progress, VI, 576.

—— 1911 C

Beiträge zur Kenntnis des Ceratopsidenschädels.

Neues Jahrb. Min. Geol. Pal., 1911, II, 146-162, 10 text-figs.

Abstracts in Geol. Centralbl., XVIII, 330; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 140-141; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 208.

—— 1911 D

Ueber *Erythrosuchus*, Vertreter der neuen Reptil-Ordnung *Pelycosima*.

Geol. Pal. Abh. Jena (N.F.), X, 1-60, pls. I-XII, 60 text-figs.

Abstract in Geol. Centralbl., XVI, 714-715; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 209. Review in Jour. Geol., XIX, 661-664.

—— 1911 E

Beiträge zur Kenntnis und Beurteilung der Parasuchier.

Geol. Pal. Abh. Jena (N.F.), X, 65-121, pls. I-VIII, 36 text-figs.

Abstracts in Rev. crit. Paléozool., XV, 208; Geol. Centralbl., XVI, 714; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 209.

—— 1911 F

Ueber die Procolophoniden mit einer neuen Form aus dem Buntsandstein.

Centralbl. Min. Geol. Pal., 1911, 78-83, 5 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 208.

—— 1911 G

Skeletsystem. Paläontologisches.

Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 145, 161.

—— 1912 A

Die Cotylosaurier der Trias.

Palaeontogr., LIX, 69-102, pls. IV-IX, 30 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 444-445; Geol. Centralbl., XVIII, 328-330.

—— 1912 B

Der zweite Fund des Rhynchocephalen *Brachyrhinodon* in Elgin.

Neues Jahrb. Min. Geol. Pal., 1912, I, 51-57, pls. IV, V, 4 text-figs.

Huene, Friedrich—Continued 1912 C

Review of R. S. Lull: The life of the Connecticut Trias.

Neues Jahrb. Min. Geol. Pal., 1912, II, 120.

An abstract of Lull's paper. Lull, R. S., 1912 D. Amer. Jour. Sci., XXXIII, 1912, 397-422.

—— 1912 D

Beiträge zur Kenntnis des Schädels von *Eryops*.

Anat. Anz., XLI, 98-104, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 448; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 76.

—— 1912 E

Der Unterkiefer von *Diplocaulus*.

Anat. Anz., XLII, 472-475, 3 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 350; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 77.

—— 1912 F

Die Herkunft des Os interparietale der Mammalia.

Anat. Anz., XLII, 522-524, 5 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1913, Ref., II, 346; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 77.

—— 1912 G

[Remarks made in course of reviewing papers on vertebrate paleontology.]

Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 134-143.

—— 1913 A

A new phytosaur from the palisades near New York.

Bull. Amer. Mus. Nat. Hist., XXXII, 275-283, pls. XLIX, L, 14 text-figs.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1914, I, 334; Sci. Progress, VIII, 641; Rev. crit. Paléozool., XVIII, 5; XX, 49; Geol. Zentralbl., XXI, 264; Nature, XCII, 514.

—— 1913 B

The skull elements of the Permian Tetropoda in the American Museum of Natural History, New York.

Bull. Amer. Mus. Nat. Hist., XXXII, 315-386, 57 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 150-151; Rev. crit. Paléozool., XVIII, 5; XX, 50-54; XXI, 49; Geol. Zentralbl., XXI, 267; Geol. Mag. (5), X, 571.

—— 1913 C

Über *Lysorophus* aus dem Perm von Texas.

Anat. Anz., XLIII, 389-396, 5 text-figs.

For review see Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 350-352.

Huene, Friedrich—Continued 1913 D

Das Hinterhaupt von *Dimetrodon*.

Anat. Anz., XLIII, 519-522, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 68.

—— 1913 E

Ad notam.

Centralbl. Min. Geol. Pal., 1913, 480.

—— 1913 F

Beobachtungen über die Bewegungsart der Extremitäten bei Krokodilen.

Biol. Centralbl., XXXIII, 468-472, 7 figs.

—— 1913 G

Stegocephalen.

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena), IX, 501-508, figs. 1-21.

The bibliography comprises 15 titles.

—— 1914 A

The dinosaurs not a natural order.

Amer. Jour. Sci. (4), XXXVIII, 145-146.

—— 1914 B

Saurischia and Ornithischia.

Geol. Mag. (6), I, 444-445.

Abstract in Geol. Zentralbl., XXVI, 315.

—— 1914 C

Über die Zweistämmigkeit der Dinosaurier, mit Beiträgen zur Kenntnis einiger Schädel.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd. XXXVII, 577-589, pls. vii-xii.

Abstract in Geol. Zentralbl., XXII, 414.

—— 1914 D

Das natürliche System der Saurischia.

Centralbl. Min. Geol. Pal., 1914, 154-158, 1 text-fig.

Abstract in Geol. Zentralbl., XXII, 29.

—— 1914 E

Neue Beschreibung von *Ctenosaurus* aus dem Göttinger Buntsandstein.

Centralbl. Min. Geol. Pal., 1914, 496-499, 2 text-figs.

Abstract in Geol. Zentralbl., XXII, 413.

—— 1914 F

Coelurosaurier-Reste aus dem unteren Muschelkalk.

Centralbl. Min. Geol. Pal., 1914, 670-672, 2 text-figs.

—— 1914 G

Beiträge zur Geschichte der Archosaurier.

Geol. Pal. Abh. Jena (N.F.), XIII (XVII), 1-53, pls. i-vii, 61 text-figs.

There is a bibliography of 45 titles.

Abstracts in Neues Jahrb. Min. Geol., 1914, I, Ref., 503-507; Geol. Zentralbl., XXII, 414.

Huene, Friedrich—Continued 1914 H

Beiträge zur Kenntnis des Schädels einiger Pterosaurier.

Geol. Pal. Abh. Jena (N.F.), XIII (XVII), 55-65, pls. i, ii, 10 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1917, I, 109-110.

Abstract in Geol. Zentralbl., XXII, 414.

—— 1914 I

Nachträge zu meinen früheren Beschreibungen triassischer Saurischia.

Geol. Pal. Abh. Jena, (N.F.), XIII (XVII), 67-82, 56 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, 507; Geol. Zentralbl., XXII, 414.

—— 1914 J

Ueber Ichthyosaurier der Schwäbischen Trias.

Jahresh. Ver. Naturk. Württemb., LXX, lxxxix-xc.

—— 1914 K

Saurischia und Ornithischia triadica ("Dinosauria" triadica).

Fossilium Catalogus. I: Animalia. Pt. IV, 1-21.

A list of the genera and species, with references to the most important literature of the subject.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 468.

—— 1915 A

On reptiles of the New Mexican Trias in the Cope collection.

Bull. Amer. Mus. Nat. Hist., XXXIV, 485-507, 64 text-figs.

Abstract in Geol. Zentralbl., XXVIII, 446.

—— 1915 B

Beiträge zur Kenntnis einiger Saurischier der schwäbischen Trias.

Neues Jahrb. Min. Geol. Pal., 1915, I, 1-27, pls. i-vii, text-figs. 1-17.

—— 1916 A

Beiträge zur Kenntnis der Ichthyosaurier im deutschen Muschelkalk.

Palaeontogr., LXII, 1-68, pls. i-viii, 96 text-figs.

Abstracts in Rev. crit. Paléozool., XXVIII, 20; Geol. Zentralbl., XXIV, 29-31.

—— 1918 A

Review of W. D. Matthew's "A marsupial from the Belly River Cretaceous" (Matthew, W. D., 1916 A).

Neues Jahrb. Min. Geol. Pal., 1918, Ref., 207-210.

Huene, Friedrich—Continued 1920 A

Stammesgeschichtliche Ergebnisse einiger Untersuchungen an Trias-Reptilien.

Zeischr. indukt. Abstamm. Vererbl., XXIV, 159-163, pl. vii, 1 text-fig.

—— 1920 B

Neue Beobachtungen an *Simosaurus* und ihre Verwertung zur Stammesgeschichte der Sauropterygier.

Zeitschr. indukt. Abstamm. Vererbl., XXIII, 206-209.

—— 1920 C

Systematische und genetische Betrachtungen über die Stegocephalen.

Zeitschr. indukt. Abstamm. Vererbl., XXIII, 209-212.

—— 1920 D

Sclerosaurus und seine Beziehungen zu anderen Cotylosauriern und zu den Schildkröten.

Zeitschr. indukt. Abstamm. Vererbl., XXIV, 163-166.

—— 1920 E

Ein Parasuchier aus dem oberen Muschelkalk von Bayreuth.

Senckenbergiana, II, 143-145, with figs.

—— 1920 F

Gonioglyptus, ein alttriassischer Stegocephale aus Indien.

Acta Zool., I, 433-464, pls. i-iii, 14 text-figs.

There are 30 titles cited in the bibliography.

—— 1920 G

Osteologie von *Aëtosaurus ferratus* O. Fraas.

Acta Zool., I, 465-491, 51 text-figs.

11 papers are cited in the bibliography.

—— 1921 A

Neue Beobachtungen an *Simosaurus.*

Acta Zool., II, 1921, 201-239, pls. i-iii, 14 text-figs.

—— 1921 B

Reptilian and stegocephalian remains from the Triassic of Pennsylvania in the Cope collection.

Bull. Amer. Mus. Nat. Hist., XLIV, 561-574, 20 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1923, II, 427.

—— 1921 C

Coelurosaurier-Reste aus dem obersten Keuper von Halberstadt.

Centralbl. Min. Geol. Pal., 1921, 315-320, 6 figs.

Abstract in Geol. Zentralbl., XXVII, 509.

Huene, Friedrich—Continued 1921 D

Neue Pseudosuchier und Coelurosaurier aus dem württembergischen Keuper.

Acta Zool., II, 329-403, 4 pls., 35 text-figs.

20 papers are listed in the bibliography.

—— 1922 A

Ueber einen Sauropoden im obern Malm des Berner Jura.

Eclogæ geol. Helvetiæ, XVII, 80-94, pl. 4.

The bibliography includes 26 titles.

—— 1922 B

Die Ichthyosaurier des Lias und ihre Zusammenhänge.

4to., Berlin, i-vi+1-114 pages, 25 pls.

Pages 109-114 are occupied by the bibliography.

Abstract in Geol. Zentralbl., XXX, 445-446.

Review in Jour. Geol., XXXI, 687; Nature, CXII, 276.

—— 1922 C

Zur Osteologie des *Dicynodon*-Schädels.

Palaeont. Zeitschr., V, 58-71, 4 figs.

The volume is sometimes cited as of 1923.

Abstract in Geol. Zentralbl., XXXII, 118.

—— 1922 D

Bemerkungen über das Becken von *Ichthyosaurus quadricissus.*

Centralbl. Min. Geol. Pal., 1922, 277-282, 1 fig.

—— 1922 E

The Triassic reptilian order Thecodontia.

Amer. Jour. Sci. (5), IV, 22-26.

The bibliography presents 27 titles.

Abstract in Geol. Zentralbl., XXIX, 253.

—— 1922 F

Kurzer Überblick über die triassische Reptilordnung Thecodontia.

Centralbl. Min. Geol. Pal., 1922, 408-415, 1 table.

The bibliography consists of 26 titles.

—— 1922 G

Beiträge zur Kenntnis der Organisation einiger Stegocephalen der schwäbischen Trias.

Acta Zool., III, 395-460, pls. i, ii, 44 text-figs.

The bibliography presents 42 titles.

Abstract in Neues Jahrb. Min. Geol. Pal., 1923, II, 423-424.

—— 1922 H

Neue Untersuchungen zur Kenntnis der Parasuchier.

Jahrb. geol. Landesanst., Berlin, XLII, 1921 (1922), 59-160, 153 figs.

The literature cited comprises 60 titles.

Huene, Friedrich—Continued 1922 I

Parasuchier und ihre Verwandten.

Jahresh. Ver. Naturk. Württemb., LXVIII, xlv-xlvi.

—— 1923 A

Carnivorous Saurischia in Europe since the Triassic.

Bull. Geol. Soc. Amer., XXXIV, 449-458, 3 figs.

—— 1923 B

Contribution to the vomer-parasphenoid question.

Bull. Geol. Soc. Amer., XXXIV, 459-462, 2 figs.

—— 1923 C

Lines of phyletic and biological development of the Ichthyopterygia.

Bull. Geol. Soc. Amer., XXXIV, 463-468, 2 figs.

—— 1923 D

Die Stammesentwickelung der Ichthyosaurier.

Palaeont. Zeitschr., V, 265-271.

—— 1925 A

Ichthyosaurier-Reste aus Argentinien.

Centralbl. Min. Geol. Pal., 1925, 90-95, 6 figs.

—— 1925 B

Eine neue Rekonstruktion von *Compsognathus*.

Centralbl. Min. Geol. Pal., 1925, 157-160, 1 fig.

The bibliography presents 12 titles.

—— 1925 C

Triassischer Säugetierzahn aus Südwestafrika.

Centralbl. Min. Geol. Pal., 1925, 174-181, 3 figs.

—— 1925 D

Stammlinien der Reptilien.

Centralbl. Min. Geol. Pal., 1925, 229-239, 9 figs.

The bibliography includes 19 titles.

—— 1925 E

Einige Beobachtungen an *Mixosaurus cornalianus* (Bassani).

Centralbl. Min. Geol. Pal., 1925, 289-295, 3 figs.

There is a bibliography of 9 titles.

—— 1925 F

Ichthyosaurier aus der Kreide Argentiniens.

Rev. Mus. La Plata, XXVIII (ser. 3, IV), 234-238, figs. 1-5.

In German, followed by a Spanish translation.

Huene, Friedrich—Continued 1925 G

Die Bedeutung der *Sphenosuchus* Gruppe für den Ursprung der Krokodile.

Zeitschr. indukt. Abstamm. Vererbl., XXXVIII, 307-320, folding pls. iv, v, 1 text-fig.

The bibliography contains 14 titles.

—— 1925 H

Shastasaurus-Reste in der alpinen Trias.

Centralbl. Min. Geol. Pal., 1925, 412-417.

—— 1925 I

Ein neuer Pelycosaurier aus der unteren Permformation Sachsens.

Geol. Pal. Abh. Jena, XVIII (N.F. XIV), 215-264 (Heft 5, 3-52), pls. xxvi-xxxiii (i-viii), 28 text-figs.

In the bibliography are recorded 105 titles.

—— 1926 A

Zur Frage der phylogenetischen Bedeutung des Wirbelbaues der Tetrapoden.

Palaeont. Zeitschr., VII, 260-267, 3 figs.

—— 1926 B

The carnivorous Saurischia in the Jura and Cretaceous formations principally in Europe.

Rev. Mus. La Plata, XXIX, 35, 167, pls. i, ii, 56 text-figs.

Pages 114 to 167 are occupied by a Spanish version of the article. On pages 110 to 114 are presented 91 titles of papers pertaining to the subject.

Review in Amer. Jour. Sci. (5), XII, 458.

—— 1926 C

Neue Ichthyosaurierfunde aus dem schwäbischen Lias.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd., 66-86, pls. iii-v, 8 text-figs.

—— 1926 D

On several known and unknown reptiles of the order Saurischia from England and France.

Ann. Mag. Nat. Hist. (9), XVII, 473-489, 11 figs.

There is a bibliography of 20 titles.

—— 1926 E

Notes on the age of the continental Triassic beds in North America, with remarks on some fossil vertebrates.

Proc. U. S. Nat. Mus., LXIX, art. 18, 1-10, 6 figs.

—— 1926 F

Zur Beurteilung von *Protorosaurus*.

Centralbl. Min. Geol. Pal., 1926, Abt. B, 469-475, 1 fig.

Huene, Friedrich—Continued 1926 G
Einige Schildkrötenreste aus der obersten Trias Württembergs.
Centralbl. Min. Geol. Pal., 1926, Abt. B, 509-514.

—— 1926 H
Volständige Osteologie eines Plateosauriden aus dem Schwäbischen Keuper.
Geol. Pal. Abh. Jena, xv, 1-43, 7 pls, 2 text-figs.

—— 1926 I
Gondwana-Reptilien in Südamerika.
Palæont. Hungarica, II, 1-108, pls. i-xxii, 37 text-figs.
On page 87 is a bibliography of 28 titles; on pages 91-92, 32 titles; on page 99, 17 titles.

—— 1927 A
Beitrag zur Kenntnis mariner mesozoischer Wirbeltiere in Argentinien.
Centralbl. Min. Geol. Pal., 1926, Abt. B, 22-29, 3 figs.

—— 1927 B
Sichtung der Grundlagen der jetzigen Kenntnis der Sauropoden.
Eclogæ geol. Helvetiæ, xx, 444-470, folded pls. xiv, xv.

—— 1927 C
Short review of the present knowledge of the Sauropoda.
Mem. Queensl. Mus., IX, 121-126.

—— 1927 D
Ein kalifornischer Säbellöwe.
Aus der Heimat, XL, 144-149, 5 figs.
7 titles are included in the bibliography.

—— 1927 E
Die Beziehungen zwischen den paläozoischen und den mesozoischen Reptilien.
Palaeont. Zeitschr., IX, 319-326.
The literature is cited in foot-notes.

—— 1927 F
Lebensbild des Saurischier-Vorkommens im obersten Keuper von Trossingen in Württemberg.
Palæobiol., I, 103-116, pl. X, 2 text-figs.
There is a bibliography of 16 titles.

—— 1927 G
Contribución a la paleogeografía de Sud América.
Bol. Acad. Cien. Córdoba, xxx, 231-294.
Contains (251-265) lists of the Upper Cretaceous reptiles of North America.

Huene, Friedrich, and R. S. **Lull** 1908 A
Neubeschreibung des Originals von *Nanosaurus agilis* Marsh.
Neues Jahrb. Min. Geol. Pal., 1908, I, 134-144, pl. xiii, 10 text-figs.
Abstracts in Geol. Zentralbl., XII, 151; Nature, LXXXIII, 532.

—— —— 1908 B
On the Triassic reptile, *Hallopus victor* Marsh.
Amer. Jour. Sci. (4), xxv, 113-118.
Abstracts in Geol. Centralbl., XI, 473; XII, 599; Nature, LXXVIII, 156; Neues Jahrb. Min. Geol. Pal. 1910, II, Ref., 144; Sci. Progress, III, 461.

Hulke, J. W. 1873 A
Contribution to the anatomy of *Hypsilophodon foxii.*
Quart. Jour. Geol. Soc., XXIX, 522-531, pl. xviii.

—— 1874 A
Supplemental note on the anatomy of *Hypsilophodon foxii.*
Quart. Jour. Geol. Soc., XXX, 18-23, pl. iii.

—— 1875 A
Appendix to "Note on a modified form of dinosaurian ilium, hitherto reputed scapula."
Quart. Jour. Geol. Soc., XXXII, 364-366, 4 figs.

—— 1878 A
Note on two skulls from the Wealden and Purbeck formations indicating a new subgroup of Crocodilia.
Quart. Jour. Geol. Soc., XXXIV, 377-381, pl. xv.

Hull, Edward 1908 A
On the spread of existing animals through Europe and to the islands of the Atlantic; based on Dr. Scharff's recent work "European animals."
Jour. Victoria Inst., XL, 145-159; 166-167, a map.

—— 1914 A
On recent investigations of the suboceanic physical features of the North Atlantic Ocean as confirming the view of the distribution of European animals by land-connection with America in late Tertiary times.
C. R. Congr. internat. Zool., IX, Monaco, 1913, 611-616.

Humboldt, Alexander 1838 A
Über den Manati des Orinoko.
Arch. Naturges., IV, i, 1-18.

Hummel, K. 1927 A

Die Schildkrötengattung *Trionyx* im Eozän von Messel bei Darmstadt und im aquitanischen Blättersandstein von Münzenberg in der Wetteau.

Abh. hess. geol. Landesanst., VIII, Heft 2, 1-96, pls. i-xi.

Humphreys, John 1908 A

The teeth of fossil fishes.

Proc. Roy. Soc. Med., I, pt. 3, Odont. sec., 7-16, pl. i.

Humphry, G. M. 1870 B

A comparison of the shoulder bones and muscles with the pelvic bones and muscles.

Jour. Anat. Physiol. Lond., V, 67-88, pl. iii.

—— 1876 A

On the comparison of the fore and hind limbs in vertebrates.

Jour. Anat. Physiol. Lond., X, 659-671.

Huntsman, A. G. 1919 A

Variation of fishes according to latitude.

Science (n.s.), L, 592.

Huot, André 1902 A

Recherches sur le poissons lopho branches.

Ann. Sci. nat. (8), XIV, 197-288, pls. xxi-xxvi, 13 text-figs.

The bibliography presents titles of 57 works consulted.

Husband, Rachel A. 1924 A

Variability in *Bubo virginianus* from La Brea.

Condor, XXVI, 220-225, figs. 54-56.

Huschke, Emil 1822 A

Ueber Weber's "Gehörknöckelchen der Fische."

Isis von Oken, 1822, II, cols. 889-893.

Hussakof, Louis 1905 A

Notes on the Devonian "placoderm," *Dinichthys intermedius* Newb.

Bull. Amer. Mus. Nat. Hist., XXI, 27-36, pl. v, text-figs. 1, 2.

Abstracts in Geol. Centralbl., VIII, 380. Rev. crit. Paléozool., X, 210.

—— 1905 B

On the structure of two imperfectly known dinichthyids.

Bull. Amer. Mus. Nat. Hist., XXI, 409-414, pls. xv-xvii; 2 text-figs.

Abstracts in Geol. Centralbl., VIII, 379-380; Rev. crit. Paléozool., X, 210.

Hussakof, Louis—Continued 1906 A

Studies on the Arthrodira.

Mem. Amer. Mus. Nat. Hist., IX, 105-154, pls. xii, xiii, 25 text-figs.

Abstract in Rev. crit. Paléozool., XI, 19-21.

—— 1908 A

Catalogue of types and figured specimens of fossil vertebrates in the American Museum of Natural History. Part I: Fishes.

Bull. Amer. Mus. Nat. Hist., XXV, 1-103, pls. i-vi, 49 text-figs. With a preface by Bashford Dean, pages 1-2.

Abstracts in Geol. Centralbl., XV, 310; Amer. Jour. Sci. (4), XXVII, 92; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 158.

—— 1908 B

A model of a restoration of *Dinichthys.*

Science (n.s.), XXVII, 255.

—— 1908 C

Devonic fishes of the New York formations. By Charles R. Eastman. A review.

Science (n.s.), XXVIII, 311-313.

—— 1909 A

A new goblin shark, *Scapanorhynchus jordani,* from Japan.

Bull. Amer. Mus. Nat. Hist., XXVI, 257-262, pl. xliv, 3 text-figs.

—— 1909 B

The systematic relationships of certain American arthrodires.

Bull. Amer. Mus. Nat. Hist., XXVI, 263-272, pl. xlv, 8 text-figs.

Reviewed in Amer. Jour. Sci. (4), XXVIII, 411. Abstracts in Geol. Centralbl., XVI, 60; Rev. crit. Paléozool., 13, 209.

—— 1910 A

Louis Agassiz's later views on the classification of fishes.

Science (n.s.), XXXII, 925-926.

—— 1910 B

Vertebrate paleontology and the evidences for recapitulation.

Pop. Sci. Month., LXXVII, 304-307.

—— 1911 A

The Permian fishes of North America.

Publ. Carnegie Instn. Wash., No. 146, 155-175, pls. xxvi-xxxii, text-figs. 53-56.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 160; Sci. Progress, VI, 582, 583.

Hussakof, Louis—Continued 1911 B

Notes on some Upper Devonian Arthrodira from Ohio, U. S. A., in the British Museum (Natural History).

Geol. Mag. (5), VIII, 123-128, pl. viii, 3 text-figs.

Abstracts in Geol. Centralbl., XVII, 665; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 112.

—— 1912 A

The Cretaceous chimæroids of North America.

Bull. Amer. Mus. Nat. Hist., XXXI, 195-227, pls. xix, xx, 21 text-figs.

Abstracts in Geol. Centralbl., XX, 706; Rev. crit. Paléozool., XVII, 79.

—— 1912 B

Notes on Devonic fishes from Scaumenac Bay, Quebec.

Bull. N. Y. State Mus., CLVIII, 127-139, pls. i-iii, 6 text-figs.

Abstracts in Geol. Centralbl., XIX, 703; Rev. crit. Paléozool., XVII, 141.

—— 1912 C

An extinct giant-shark.

Scient. Amer. Suppl., LXXIII, 225, 2 figs.

—— 1913 A

Descriptions of four new Palaeozoic fishes from North America.

Bull. Amer. Mus. Nat. Hist., XXXII, 245-250, pl. xlvii, 2 text-figs.

Abstracts in Sci. Progress, VIII, 652; Rev. crit. Paléozool., XVIII, 9; Geol. Zentralbl., XXI, 267.

—— 1914 A

The pleuracanthid sharks, with special reference to the cranium.

Ann. N. Y. Acad. Sci., XXII, 266-267 (abstract).

—— 1916 A

The lungfish remains of the Coal Measures of Ohio, with special reference to the supposed amphibian *Eurythorax* of Cope.

Bull. Amer. Mus. Nat. Hist., XXXV, 127-133, 7 text-figs.

Abstract in Geol. Zentralbl., XXVI, 253.

—— 1916 B

Discovery of the Great Lake trout, *Cristivomer namaycush*, in the Pleistocene of Wisconsin.

Jour. Geol., XXIV, 685-689, 2 text-figs.

—— 1916 C

Note on a palaeoniscid fish from a Permian formation in South Dakota.

Amer. Jour. Sci. (4), XLI, 347-350, 2 figs.

Abstract in Geol. Zentralbl., XXV, 182.

Hussakof, Louis—Continued 1916 D

A new cyprinid fish, *Leuciscus rosei*, from the Miocene of British Columbia.

Amer. Jour. Sci. (4); XLII, 18-20, 1 fig.

—— 1926 A

Structure of the head and dorsal armor of *Dinichthys pustulosus* Eastman.

Bull. Geol. Soc. Amer., XXXVII, 245 (abstract).

—— and W. L. **Bryant** 1915 A

Fish fauna of the conodont bed (Basal Genesee) at Eighteen-mile Creek, New York.

Bull. Geol. Soc. Amer., XXVI, 154 (abstract).

—— —— 1919 A

Catalog of the fossil fishes in the museum of the Buffalo Society of Natural Sciences.

Bull. Buffalo Soc. Nat. Sci., XII, 1-346, 70 pls., 64 text-figs.

Hussey, John 1878 A

Report of the geology of Miami County [Ohio].

Geol. Surv. Ohio, III, pt. 1, 468-481.

Hutchinson, H. N. 1893 A

Review in Geol. Mag. (3), X, 41-43.

—— 1910 A

Extinct monsters and creatures of other days. A popular account of some of the larger forms of ancient animal life.

London: Chapman & Hall, 1910.

New York: D. Appleton & Co., 1911.

i-xxxiv+1-330 pages, pls. i-lv, 113 text-figs.

Review in Geol. Mag. (5), VIII, 129-131.

—— 1916 A

Exhibition of model of *Diplodocus carnegiei*.

Proc. Zool. Soc. Lond., 1916, 539.

—— 1917 A

Observations on the reconstructed skeleton of the dinosaurian reptile *Diplodocus carnegiei* as set up by Dr. W. J. Holland in the Natural History Museum in London, and an attempt to restore it by means of a model.

Geol. Mag. (6), IV, 356-370, pls. xxii, xxiii, 8 figs.

Hutton, J. Arthur 1909 A

Salmon scales as indicative of the life history of the fish.

London, 8vo., pages 1-27, pls. i-xiv.

Hutton, J. Arthur—Continued 1910 A

Salmon scale examination and its practical utility.

London, 8vo., pages 1-54, pls. i-xxxii.

Huxley, T. H. 1853 A

On the development of the teeth, and on the nature and import of Nasmyth's "persistent capsule."

Quart. Jour. Micr. Sci., I, 149-164, pl. iii.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 224-240, pl. xxiii.

—— 1855 A

On certain zoological arguments commonly adduced in favor of the hypothesis of the progressive development of animal life in time.

Proc. Roy. Instn. G. Brit., II, 82-85.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 300-304.

—— 1855 B

On the enamel and dentine of the teeth.

Quart. Jour. Micr. Sci., vol. III, 127-130.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 357-360.

—— 1856 A

On the method of palæontology.

Ann. Mag. Nat. Hist. (2), XVIII, 43-54.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 432-444.

—— 1856 B

On natural history as knowledge, discipline, and power.

Proc. Roy. Instn. G. Brit., II, 187-195.

—— 1858 D

On *Cephalaspis* and *Pteraspis*.

Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 502-521 (Same as Huxley, T. H., 1858 A).

—— 1858 E

On a new species of *Plesiosaurus* from Street, near Glastonburg, with remarks on the structure of the atlas and axis vertebræ and of the cranium in that genus.

Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 522-537 (Same as Huxley, T. H., 1858 B).

—— 1859 D

On the theory of the vertebrate skull.

Proc. Roy. Soc. Lond., IX, 381-457, 10 figs.

Also in Ann. Nat. Hist., III, 1859, 414-439; Foster and Lankester's "Scient. Memoirs of Huxley," I, 1898, 538-606.

Huxley, T. H.—Continued 1859 E

On the *Staganolepis robertsoni* (Agassiz) of the Elgin sandstones; and on the recently discovered footmarks in the sandstones of Cummingstone.

Quart. Jour. Geol. Soc., XV, 410-460, pl. xiv.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 94-119, pl. vi.

—— 1859 F

On a new species of *Dicynodon* (*D. murrayi*) from near Colesberg, South Africa; and on the structure of the skull in the dicynodonts.

Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 131-140, pls. ix, x (Same as Huxley, T. H., 1859 C).

—— 1859 G

On the dermal armour of *Crocodilus hastingsæ*.

Quart. Jour. Geol. Soc., XV, 678-680, pl. xxv.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 166-169, pl. xi.

—— 1859 H

Observations on the development of some parts of the skeleton of fishes.

Quart. Jour. Micr. Sci., VII, 33-46, pl. iii.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 271-285, pl. xxviii.

—— 1859 I

On the dermal armour of *Jacare* and *Caiman*, with notes on the specific and generic characters of recent Crocodilia.

Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 286-312 (Same as Huxley, T. H., 1859 B).

—— 1861 D

Preliminary essay upon the systematic arrangement of the fishes of the Devonian epoch.

Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 421-460, 21 text-figs. (Same as Huxley, T. H., 1861 B).

For abstract see The Geologist, London, V, 1862, 276-280.

—— 1861 E

On *Pteraspis dunensis* (*Archæoteuthis dunensis* Roemer).

Foster and Lankester's "Scient. Memoirs of Huxley," II, 417-420, 2 text-figs. (Same as Huxley, T. H., 1861 A).

Huxley, T. H.—Continued 1862 A

The anniversary address to the Geological Society.

Quart. Jour. Geol. Soc., XVIII, xl-liv.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 512-529.

—— 1863 B

Description of a new specimen of *Glyptodon* recently acquired by the Royal College of Surgeons.

Proc. Roy. Soc. Lond., XII, 316-326.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 546-555.

—— 1863 C

Description of *Anthracosaurus russelli*, a new labyrinthodont from the Lanarkshire coal field.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," II, 1899, 558-572, 2 figs. (Same as Huxley, T. H., 1863 A).

—— 1863 D

On the skeleton of a glyptodon.

Med. Times and Gazette, 1863, I, 205-207; 233-234; 4 figs.

—— 1863 E

On the structure and classification of the Vertebrata.

Med. Times and Gazette, 1863, I, 417-419, 443-444, 471-472, 527-530, 553-556, 607-610, 633-635.

—— 1863 F

Lectures on the vertebrate skull.

Med. Times and Gazette, 1863, II, 1-6, 57-58, 107-110, 189-192, 371-374, 425-429, 475-478, 529-531, 579-580, 607-609, 633-636, 663-668, 63 text-figs.

—— 1864 B

On the osteology of the genus *Glyptodon*.

Proc. Roy. Soc. Lond., XIII, 108.

—— 1864 C

On the cetacean fossils termed "*Ziphius*" by Cuvier, with a notice of a new species *Belemnoziphius compressus* from the Red Crag.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 1-10, pl. i (Same as Huxley, T. H., 1864 A).

—— 1864 D

On the structure and classification of the Mammalia.

Med. Times and Gazette, 1864, I, pp. 153-154, 177-178, 203-204, 229, 256-257, 284-285, 312-313, 343-344, 369-370, 398-399, 428-429, 456-457, 486-487, 509-510, 537-538, 564-565, 595-596, 617-618, 647-648, 671-672; II, pp. 40-41, 93-94, 123-124, 145-147.

Abstracts of a course of lectures.

Huxley, T. H.—Continued 1865 B

On the osteology of *Glyptodon*.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 37-84, pls. v-x (Same as Huxley, T. H., 1865 A).

—— 1865 C

On a collection of vertebrate fossils from the Panchet rocks near Ranigung, Bengal.

Palaeont. Ind. (4), I, 1-24, pls. i-vi.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 90-120, pls. xii-xvi.

—— 1866 B

Illustrations of the structure of the crossopterygian ganoids.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," suppl. vol., 1903, 20-67, pls. i-x.

(Same as Huxley, T. H., 1866 A.)

—— 1867 C

On the classification of birds; and on the taxonomic value of the modifications of certain of the cranial bones observable in that class.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 239-292, 36 text-figs. (Same as Huxley, T. H., 1867 A).

—— 1867 D

On a new specimen of *Telerpeton elginense*.

Quart. Jour. Geol. Soc., XXIII, 77-84, 5 figs.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 205-213, 5 figs.

—— 1868 B

Letter on the classification of birds.

The Ibis (2), IV, 357-362.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 292-297.

—— 1868 C

On the classification of the Alectoromorphæ and Heteromorphæ.

Proc. Zool. Soc. Lond., 1868, 294-319, 16 text-figs.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 346-373, 16 text-figs.

—— 1868 D

On the animals which are most nearly intermediate between birds and reptiles.

"Scient. Memoirs of Huxley," (Foster and Lankester), III, 1901, 303-313 (Same as Huxley, T. H., 1868 A).

Huxley, T. H.—Continued 1868 E

Remarks on *Archæopteryx lithographica.*

Proc. Roy. Soc. Lond., XVI, 243-248.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 340-345.

—— 1869 B

Abstract in Jour. Anat. Physiol. Lond., IV, 309.

—— 1869 E

On *Hypsilophodon*, a new genus of Dinosauria.

Geol. Mag., VI, 573.

—— 1869 F

Further evidence of the affinity between the dinosaurian reptiles and birds.

Geol. Mag., VI, 573-574.

—— 1869 G

On the representatives of the malleus and the incus of the Mammalia in the other Vertebrata.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 436-453, 8 text-figs. (Same as Huxley, T. H., 1869 B).

—— 1869 H

On *Hyperodapedon.*

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 374-390, with 1 text-fig. (Same as Huxley, T. H., 1869 C).

—— 1869 I

On the upper jaw of *Megalosaurus.*

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 394-396, pl. xxvii (Same as Huxley, T. H., 1869 D).

—— 1869 J

Further evidence of the affinity between the dinosaurian reptiles and birds.

Nature, I, 91.

Abstract of Huxley, T. H., 1870 C.

—— 1869 K

On the Dinosauria of the Trias, with observations on the classification of the Dinosauria.

Nature, I, 146.

—— 1870 E

On *Hypsilophodon foxii*, a new dinosaurian from the Wealden of the Isle of Wight.

Quart. Jour. Geol. Soc., XXVI, 3-12, pls. i, ii.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 454-464, pl. xxviii.

Huxley, T. H.—Continued 1870 F

The anniversary address of the president.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 510-550 (Same as Huxley, T. H., 1870 B).

—— 1870 G

Further evidences of the affinity between the dinosaurian reptiles and birds.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 465-486, 5 text-figs. (Same as Huxley, T. H., 1870 C).

—— 1870 H

On the classification of the Dinosauria, with observations on the Dinosauria of the Trias.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 487-509, pl. xxix (Same as Huxley, T. H., 1870 D).

—— 1870 I

Triassic Dinosauria.

Nature, I, 23-24.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 599-600.

—— 1871 A

Description of vertebrate remains from the Jarrow colliery.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," III, 1901, 182-197, pls. xvii-xxiii (Same as Huxley, T. H., 1867 B).

—— 1874 B

On the structure of the skull and of the heart of *Menobranchus lateralis.*

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 1-22, pls. i-iv (Same as Huxley, T. H., 1874 A).

—— 1875 D

Note on the development of the columella auris in the Amphibia.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 23-25 (Same as Huxley, T. H., 1875 A).

—— 1875 E

On *Staganolepis robertsoni* and on the evolution of the Crocodilia.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 66-83, pl. v (Same as Huxley, T. H., 1875 B).

—— 1876 D

On the classification of the animal kingdom.

Jour. Linn. Soc. Zool., XII, 199-226.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 35-60.

Huxley, T. H.—Continued 1876 E

On *Ceratodus forsteri*, with observations on the classification of fishes.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 84-124, 11 figs. (Same as Huxley, T. H., 1876 A).

—— 1876 F

On the evidence as to the origin of existing vertebrate animals.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 163-187 (Same as Huxley, T. H., 1876 B).

—— 1877 A

The crocodilian remains found in the Elgin sandstones, with remarks on the ichnites of Cummingstone.

Mem. Geol. Surv. U. K., III, 1-58, pls. i-xvi.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 200-241, pls. viii-xxiv.

—— 1879 A

On the characters of the pelvis in the Mammalia, and the conclusions respecting the origin of mammals which may be based on them.

Proc. Roy. Soc. Lond., XXVIII, 395-405, pl. viii.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 345-356, pl. xxv. Abstract in Nature, XX, 22-24.

—— 1880 B

For title see Hay, O. P., 1902 A, p. 120.

Translation into German in Kosmos (Krause), 1881, Jahrg., V, 15-28.

—— 1880 C

The coming of age of the Origin of Species.

Nature, XXII, 1-4.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 395-403.

—— 1880 D

On the cranial and dental characters of the Canidæ.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 404-456, with 16 figs. (Same as Huxley, T. H., 1880 A).

—— 1880 E

On the application of the laws of evolution to the arrangement of the Vertebrata and more particularly of the Mammalia.

Scient. Memoirs of Huxley (Foster and Lankester), IV, 1902, 457-472 (Same as Huxley, T. H., 1880 B).

Huxley, T. H.—Continued 1880 F

On the epipubis in the dog and fox.

Proc. Roy. Soc. Lond., XXX, 162-163.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 393-394.

—— 1881 A

The rise and progress of palæontology.

Nature, XXIV, 452-455.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 508-519.

—— 1883 B

On the oviducts of *Osmerus*, with remarks on the relations of the teleostean with the ganoid fishes.

Scient. Memoirs of Huxley (Foster and Lankester), IV, 1902, 563-571, 2 figs. (Same as Huxley, T. H., 1883 A).

—— 1887 B

Further observations upon *Hyperodapedon gordoni*.

Republished in Foster and Lankester s, Scient. Memoirs of Huxley, IV, 1902, 636-657, with pls. xxvii, xxviii (Same as Huxley, T. H., 1887 A).

—— 1887 C

Preliminary note on the fossil remains of a chelonian reptile, *Ceratochelys sthenurus*, from Lord Howe's Island, Australia.

Proc. Roy. Soc. Lond., XLII, 232-238, 6 figs.

Republished in Foster and Lankester's "Scient. Memoirs of Huxley," IV, 1902, 606-611, 6 figs.

—— See **Wright**, E. P., and T. H. **Huxley**

Hyde, J. E. 1926 A

Collecting fossil fishes from the Cleveland shale.

Nat. Hist., XXVI, 497-504, 7 figs.

Hyrtl, Carl Joseph 1849 A

Ueber einige interressante Abweichung der unteren Wirbelbogen der Fische.

Sitz.-Ber. Akad. Wiss. Wien, II, 79-85.

—— 1862 A

Ueber Wirbelsynostosen und Wirbelsuturen bei Fischen.

Denk. Akad. Wiss. Wien, XX, 95-110, pls. i-iii.

Ihde, —— 1912 A

Ueber angebliche Zahnanlagen bei Vögeln.

Arch. mikr. Anat. Bonn, LXXIX, Abth. 1, 247-275, 3 text-figs.

Ihering, H. 1878 A
Ueber Wirbelverdoppelung bei Fischen.
Zool. Anz., I, 72-74.

—— 1880 A
Über die Wirbelsäule von *Pipa*.
Jena. Zeitschr. wiss. Zool., VI, 297-344, 2 figs.

—— 1891 C
Bemerkungen über die zoologisch-systematische Bedeutung der Fisch-Otolithen.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1891, 23-26.

—— 1909 A
Die Entstehungsgeschichte der Fauna der neotropischen Region.
Verh. zool.-bot. Ges. Wien, LVIII, 282-302.

—— 1910 A
Systematik, Verbreitung und Geschichte der Südamerikanischen Raubtiere.
Arch. Naturges., LXXVI, 113-179.

Illiger, Carolus 1811 A
Prodromus systematis mammalium et avium.
Berolini, 1811, 8vo., i-xviii+1-302 pages.

Imms, A. D. 1904 A
Notes on the gill-rakers of the spoonbill sturgeon, *Polyodon spathula*.
Proc. Zool. Soc. Lond., 1904, II, 22-35, pl. ii.

—— 1905 A
On the oral and pharyngeal denticles of elasmobranch fishes.
Proc. Zool. Soc. Lond., 1905, I, 41-49, pl. iii.

Ingalls, Albert G. 1926 A
Mastodon or mammoth?
Scient. Amer., Oct., 1926, 289-290; 292, 8 figs.

Ingebrigtsen, Olaf 1924 A
Das norwegische Rotwild (*Cervus elaphus* L.), Eine kraniometrische Untersuchung.
Bergens Mus. Aarbok, 1922-23 (1924), Naturvid. Raeckke, art. 7, 1-242, 4 pls., 20 pages of tables.
In the bibliography are recorded 29 titles.

Inouye, Michio 1912 A
Der Zwischenkiefer, seine Entstehung und der Verlauf der Hasenschartenkieferspalte und der schrägen Gesichtsspalte.
Anat. Hefte, Arb., XLV, 473-610, 38 text-figs.

Ishiwara, Yoshio 1921 A
On some fossil shark-teeth from the Neogene of Japan.
Sci. Rep. Tohoku Imp. Univ. (2), Geol., V, No. 3, 61-74, 3 pls.

Iwanzoff, N. 1894 A
Zur Anatomie der Knöchelchen des mittleren Ohres bei Amphibien und Reptilien.
Anat. Anz., IX, 578-584.

Jackson, C. T. 1844 A
Final report on the geology and mineralogy of New Hampshire.
4to. Concord, i-viii+1-376 pages, maps and illustrations.

—— 1851 C
Discovery of fossil fish in the Coal formation of New Brunswick.
Amer. Jour. Sci. (2), XII, 281-282.
No species are described.

—— 1854 A
An analysis of the body and scales of a species of *Palæoniscus* from the Albert coal-mine, Hillsborough, New Brunswick.
Proc. Bost. Soc. Nat. Hist., IV, 239.

—— 1854 B
On the composition of the scales of the gar-pike.
Proc. Bost. Soc. Nat. Hist., V, 92.
See also volume VI, 366 of same journal.

Jackson, Hartley H. T. 1915 A
A review of the American moles.
N. A. Fauna, XXXVIII, 1-100, pls. i-vi, 27 text-figs.

Jackson, J. Wilfrid 1915 A
Notes on degeneration in the teeth of oxen and sheep.
Ann. Mag. Nat. Hist. (8), XV, 291-295.

Jacobi, Arnold 1921 A
Die Rüsselbildung bei Säugetieren der Gegenwart und Vorzeit.
Jena. Zeitschr. Naturwiss. (N.F.), L, 199-218, 8 figs.
There is a bibliography of 7 titles and numerous citations in foot-notes.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 98.

Jacobshagen, Ed. 1920 A
Die Homologie der Wirbeltierkiemen.
Verh. Anat. Ges., XXIX, 84-95, 3 figs.

—— 1923 A
Placoidorgane und Selachierzähne.
Verh. Anat. Ges., XXXII, 174-179.

Jacquemin, E. 1834 A
Ostéologie de la corneille (*Corvus corone*).
Ann. Sci. nat. (2), II, 277-303, pls. xiv, xv.

—— 1836 A
Pneumaticité des oiseaux.
L'Institut, Paris, IV, 129-130.

—— 1837 A
Anatomie und physiologie de la corneille (*Corvus corone*) prise comme type de la classe des oiseaux. Ostéologie.
Isis von Oken, XXX, 565-648, pls. i-iv.

Jaeger, G. F. 1838 A
Zähne von *Mastodonsaurus*.
Isis von Oken, 1838, 547.

—— 1842 A
Bemerkungen über die Entwicklung des Schedels bei den Säugethieren und über die Entwicklung und Function der Knochenhöhlen.
Archiv Anat., Physiol., Med., 1842, 433-443.

—— 1850 A
Ueber die fossilen Säugethiere Würtembergs.
Nova Acta Acad. Leop. Carol., XXII, 765-934, pls. lxviii-lxxii.
Issued also as reprint in pages 1-171, with pls.

—— 1856 A
Über eine neue Species von Ichthyosauren (*Ichthyosaurus longirostris* Owen and Jäger). Nebst Bemerkungen über die übrigen in der Lias Würtembergs aufgefunden Reptilien.
Verh. Leop. Carol. Akad., XXV, 937-967, pl. xxx.

—— 1863 A
Einige Bemerkungen über die Organisation des indischen Crocodils (*Gavialis gangeticus*).
Jahresh. Ver. Naturk. Württemb., XIX, 101-107, pl. i.

Jaekel, O. 1890 D
Abstract in Geol. Mag. (3), VIII, 422-425.

—— 1891 B
Review in Geol. Mag. (3), VIII, 423.

—— 1892 B
Über *Chalcodus permianus*.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 156-158.

Jaekel, O.—Continued 1892 C
Silurian fish remains.
Bull. Geol. Soc. Amer., III, 168-170.
Discussion of remains of *Dictyorhabdus priscus, Astrapis desiderata* and *Eriptychius americanus*.

—— 1894 C
Ueber die Beziehungen der Paläontologie zur Zoologie.
Verh. deutsch. Zool. Ges., 1893, III, 76-83.

—— 1894 D
Review of E. W. Claypole: On the structure of the American pteraspidian *Palæaspis* (Claypole), with remarks on the family. (Claypole, E. W., 1892 D.)
Neues Jahrb. Min. Geol. Pal., 1894, II, Ref., 466-467.

—— 1895 C
Review of Traquair: Notes on Devonian fishes of Campbelltown and Scaumenac Bay in Canada (Traquair, R. H., 1893 C.).
Neues Jahrb. Min. Geol. Pal., 1895, I, Ref., 161-162.

—— 1895 D
Review of Charles D. Walcott's "Preliminary notes on the discovery of a vertebrate fauna in Silurian (Ordovician) strata" [Walcott, C. D., 1892 A.].
Neues Jahrb. Min. Geol. Pal., 1895, I, Ref., 162-163.

—— 1895 E
Unter-Tertiäre Selachier aus Südrussland.
Mém. Com. Géol. St. Pétersb., 9, No. 4, 19-35, pls. i, ii.

—— 1896 C
Die Organisation von *Archegosaurus*.
Zeitschr. deutsch. Geol. Ges., XLVIII, 505-521, 10 figs.

—— 1898 D
Review of papers by E. Fraas on *Hybodus*. (Fraas, E., 1895 A and 1896 A.)
Neues Jahrb. Min. Geol. Pal., 1898, I, Ref., 151-152.

—— 1899 C
Ueber die primäre Zusammensetzung des Kieferbogens und Schultergürtels.
Verh. deutch. Zool. Ges., IX, 249-258, 2 text-figs.

Jaekel, O.—Continued 1901 A

Ueber jurassiche Zähne und Eier von Chimäriden.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd., XIV, 540-564, pls. xxi-xxiv, 3 text-figs.

Abstracts in Geol. Centralbl., III, 375; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 134.

—— 1901 B

Ueber die allgemeine Form des Wirbeltierkörpers.

Naturw. Wochenschr., XVII (N.F.), I, 52-54.

—— 1902 A

Ueber *Coccosteus* und die Beurtheilung der Placodermen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1902, 103-115, one plate.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 321-322; Geol. Centralbl., III, 121; Rev. crit. Paléozool., VIII, 23; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 91.

—— 1902 B

Ueber *Placochelys* n. g. und ihre Bedeutung für die Stammesgeschichte der Schildkröten.

Neues Jahrb. Min. Geol. Pal., 1902, I, 127-144, pl. ii, one text-fig.

Abstract in Prometheus, XIV, 1903, 525; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 94.

—— 1902 C

Die Zusammensetzung des Schultergürtels.

Verh. internat. Zool.-Kongr., Berlin, V, 1901, 610-612, 1 text-fig.

—— 1902 D

Ueber einen neuen paläozoischen Tetrapodentypus: *Gephyrostegus bohemicus* n. g. n. sp.

Zeitschr. deutsch. Geol. Ges., LIV, Verh., 127-132, 2 figs.

—— 1902 E

Ueber verschiedene Wege phylogenetischer Entwickelung.

Verh. internat. Zool. Kongr. Berlin, 1901, 1058-1117, 28 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 87.

—— 1903 A

Ueber *Ceraterpeton*, *Diceratosaurus* und *Diplocaulus*.

Neues Jahrb. Min. Geol. Pal., 1903, I, 109-134, pls. ii-v and 6 text-figs.

Abstracts in Rev. crit. Paléozool., VIII, 20-21; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 153-154.

Jaekel, O.—Continued 1903 B

Über Placodermen aus dem Devon.

Zeitsch. deutsch. Geol. Ges., LV, Monatsb., 12-13.

Abstract in Geol. Centralbl., V, 173.

—— 1903 C

Bemerkungen über die Bartenwale und die Zahnwale.

Zeitschr. deutsch. Geol. Ges., LV, Monatsb., 40.

—— 1903 D

Die Organisation und systematische Stellung der Asterolepiden.

Zeitschr. deutsch. Geol. Ges., LV, Monatsb., 41-60, 8 text-figs.

Abstracts in Geol. Centralbl., V, 533; Rev. crit. Paléozool., XII, 128.

—— 1903 E

Trematapsis und Pattens Ableitung der Wirbeltiere von Arthropoden.

Zeitschr. deutsch. Geol. Ges., LV, Verh., 84-93, 5 text-figs.

Abstract in Geol. Centralbl., V, 532; also in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 160.

—— 1903 F

Über die Epiphyse und Hypophyse.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1903, 27-58, 11 text-figs.

Abstracts in Geol. Centralbl., V, 236; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 147.

—— 1903 G

Über *Ramphodus* nov. gen., einen neuen devonischen Holocephalen von Wildungen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1903, 383-393, 3 text-figs.

—— 1904 A

Eine neue Darstellung von *Ichthyosaurus*.

Zeitsch. deutsch. Geol. Ges., LVI, Monatsb., 26-34, 1 text-fig.

Abstracts in Geol. Centralbl., VII, 122; Rev. crit. Paléozool., XII, 128.

—— 1904 B

Über die Bildung der ersten Halswirbel und die Wirbelbildung im allgemeinen.

Zeitschr. deutsch. Geol. Ges., LVI, Monatsb., 109-119, 7 text-figs.

Abstract in Rev. crit. Paléozool., XII, 129.

—— 1904 C

Ueber den Schädelbau der Dicynodonten.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1904, 172-188, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 164.

Jaekel, O.—Continued 1905 A

Über die Bedeutung der Wirbelstacheln der Naosauriden.

Zeitschr. deutsch. Geol. Ges., LVII, Monatsb., 192-194, 2 text-figs.

Abstract in Geol. Centralbl., VIII, 635; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 165-166.

—— 1905 B

Über den Schädelbau der Nothosauriden.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1905, 60-84, 8 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 161.

—— 1905 C

Über die primäre Gliederung des Unterkiefers.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1905, 134-147, 14 text-figs.

—— 1906 A

Über die Mundbildung der Wirbeltiere.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1906, 7-32, 20 text-figs.

—— 1906 B

Neue Wirbeltierfunde aus dem Devon von Wildungen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1906, 73-85, 10 text-figs.

Abstract in Sci. Progress, II, 524.

—— 1906 C

Neue Rekonstruktionen von *Pleuracanthus sessilis* und von *Polyacrodus* (*Hybodus*) *hauffianus*.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1906, 155-159.

Abstract in Geol. Centralbl., XI, 175.

—— 1906 D

Einige Beiträge zur Morphologie der ältesten Wirbeltiere.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1906, 180-189, 7 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 150-151; Geol. Centralbl., XI, 231; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 158.

—— 1907 A

Über *Pholidosteus* nov. gen., die Mundbildung und die Körperform der Placodermen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1907, 170-186, 6 text-figs.

Comments on in Sci. Progress, II, 524.

Abstracts in Rev. crit. Paléozool., XIV, 230; Sci. Progress, II, 524.

Jaekel, O.—Continued 1907 B

Placochelys placodonta aus der Obertrias des Bakony.

Separatabdruck aus dem Werke "Resultate der wissensch. Erforsch. des Balatonsees, I Bd., I Th., Pal. Anhang." Pages 1-90, pls. i-x, 49 text-figs.

Recorded also as appearing in I Bd., I Th., Palaeont. Arch., III Bd., Budapest, 1911.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, II, Ref., 329-333; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 166.

—— 1908 A

Ueber die Entstehung des Jochbogens der Schildkröten.

Anat. Anz., Ergänzungsh., XXXII, 140.

—— 1908 B

Zu Gustav Steinmann's geologischen Grundlagen der Abstammungslehre.

Centralbl. Min. Geol. Pal., 1908, 461-471.

—— 1908 C

Neue Funde von Wirbeltieren aus Deutschlands Urzeit.

Aus der Natur, IV, 424-429, 2 figs.

Abstract in Nature, LXXXI, 196.

—— 1909 A

Über die Klassen der Tetrapoden.

Zool. Anz., XXXIV, 193-212, 15 text-figs.

—— 1909 B

Ueber die ältesten Gliedmassen von Tetrapoden.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1909, 587-615, 20 text-figs.

This number was probably not issued until 1910.

Abstracts in Geol. Centralbl., XIX, 526-527; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 295-296; Rev. crit. Paléozool., XIV, 228.

—— 1909 C

Entgegnung an Herrn G. Steinmann.

Centralbl. Min. Geol. Pal., 1909, 706-709.

—— 1909 D

Ueber Beurteilung der paarigen Extremitäten.

Sitz.-Ber. Akad. Wiss. Berlin, 1909, Halbbd. I, 707-724, 16 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 140.

—— 1910 A

Über die Fussstellung und Lebensweise der grossen Dinosaurier.

Zeitschr. deutsch. Geol. Ges., LXII, Monatsb., 270-277, 3 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 146-148; Geol. Centralbl., XVI, 219; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 125.

Jaekel, O.—Continued 1910 B

Naosaurus credneri im Rotliegenden von Sachsen.

Zeitschr. deutsch. Geol. Ges., LXII, Monatsb., 526-535, 1 plate, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 132-133; Geol. Centralbl., XVI, 217-220.

—— 1910 C

Über das System der Reptilien.

Zool. Anz., XXXV, 324-341, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 290-292; Sci. Progress, V, 676-677; Rev. crit. Paléozool., XIV, 288; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 158.

—— 1910 D

Über die *Paratheria*, eine neue Klasse von Wirbeltieren.

Zool. Anz., XXXVI, 113-124, 5 text-figs.

Abstract in Sci. Progress, V, 664-665.

—— 1910 E

Ueber einen neuen Belodonten aus dem Buntsandstein von Bernburg.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 197-229, 20 text-figs.

Abstracts in Sci. Progress, V, 683; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 141-145; Geol. Centralbl., XVI, 316-317.

—— 1911 A

Die Wirbeltiere. Eine Übersicht über die fossilen und lebenden Formen.

8vo., i-viii+1-252 pages, 281 text-figs.

Berlin: Borntraeger Brothers.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 161, with table; Amer. Jour. Sci. (4), XXXIII, 592; Geol. Centralbl., XVII, 475; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 202-205; Nature, LXXXIX, 134.

—— 1912 A

Die ersten Halswirbel.

Anat. Anz., XL, 609-622, 8 text-figs.

—— 1913 A

Ueber den Bau des Schädels.

Anat. Anz., Ergänzungsh., XLIV, 77-94, 8 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 70-72.

—— 1913 B

Ueber Probleme der Gebissentwicklung.

Anat. Anz., Ergänzungsh., XLIV, 194-195.

—— 1913 C

Wege und Ziele der Paläontologie.

Palaeont. Zeitschr, I, 1-57.

Jaekel, O.—Continued 1914 A

Über die Wirbeltierfunde in der oberen Trias von Halberstadt.

Palaeont. Zeitschr., I, 155-215, pls. iv, v, 34 text-figs.

Pages 155-160 appeared in 1913.

—— 1915 A

Die Wirbeltierfunde aus dem Keuper von Halberstadt. Testudinata.

Palaeont. Zeitschr., II, 88-112, pl. i, 12 text-figs.

Abstracts in Geol. Zentralbl., XXIII, 382; XXIV, 26.

—— 1915 B

Die Flügelbildung der Flugsaurier und Vögel.

Anat. Anz., XLVIII, 1-19, 6 text-figs.

The bibliography presents 20 titles.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1917, I, 108; Aquila, XXIII, 386, 587.

—— 1916 A

Die Wirbeltierfunde aus dem Keuper von Halberstadt.

Palaeont. Zeitschr., II, 113-214, pls. ii-vii, text-figs. 13-50.

A continuation of Jaekel, O., 1915 A.

Abstract in Geol. Zentralbl., XXIII, 382.

—— 1918 A

Über Skeletbildungen.

Palaeont. Zeitschr., II, 228-232.

Abstract in Geol. Zentralbl., XXV, 232.

—— 1919 A

Die Mundbildung der Placodermen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1919, 73-110, 17 figs.

The bibliography in foot-notes presents 20 titles.

Abstracts in Geol. Zentralbl., XXVI, 506; Neues Jahrb. Min. Geol. Pal., 1920, I, Ref., 248-249.

—— 1921 A

Die Stellung der Paläontologie zu einigen Problemen der Biologie und Phylogenie.

Palaeont. Zeitschr., III, 213-239, 11 figs.

—— 1922 A

Discussion on *Trachodon*.

Palaeont, Zeitschr., IV, 91.

—— 1922 B

Discussion on Ichthyosauria.

Palaeont. Zeitschr., IV, 119.

—— 1923 A

Neues über Hemispondylia.

Palaeont. Zeitschr., V, 1-25, 1 pl., 8 figs.

—— 1925 A

Über die von Professor Stromer im Cenoman Aegyptens entdeckten Reste von *Symoliophis*.

Palaeont. Zeitschr., VII, 165.

Jaekel, O.—Continued 1925 B

Über die Organisation und Lebensweise der Asterolepiden.

Palaeont. Zeitschr., VII, 166-169; 170.

—— 1925 C

Remarks made in discussion of the law of irreversibility in evolution.

Palaeont. Zeitschr., VII, 181-182.

—— 1926 A

Neue Forschungen über das Primordial-Cranium und Gehirn paläozoischer Fische.

Palaeont. Zeitschr., VIII, 161-184, 5 figs.

—— 1926 B

Beiträge zu einer Theorie des knöchernen Schädels der Wirbeltiere.

Palaeont. Zeitschr., VIII, 43.

—— 1926 C

Über Epiphysen an den Hinterhaupts-Kondylen.

Palaeont. Zeitschr., VIII, 60-61.

—— 1926 D

Über die Phylogenie der Störe.

Palaeont. Zeitschr., VIII, 70-71.

Followed in discussion by Pompeckj and Sewertzoff.

—— 1926 E

Discussion on epiphyses of *Ursus*.

Palaeont. Zeitschr., VIII, 60-61.

—— 1926 F

Zur Kenntnis der Mesosaurier (Discussion).

Palaeont. Zeitschr., VIII, 61-62.

—— 1928 A

Discussion on the theory of the bony skull of the vertebrates.

Palaeont. Zeitschr., VIII, 43.

——, and E. **Philippi** 1903 A

Amphibien der Trias.

Frech's Lethæa geognostica. Pt. II: Das Mesozoicum. Vol. I, Trias, 13-14, pls. viii-xi, text-figs.

James, Joseph F. 1891 B

Prehistoric man and the horse in North America.

Scient. Amer., LXV, 161.

—— 1895 A

Remarks on *Daimonelix*, or "devil's corkscrew," and allied fossils.

Amer. Geologist, XV, 337-342, pls. xi, xii, 1 text-fig.

Janensch, William 1904 A

Über den Skeletbau der Glyptodontiden.

Zeitschr. deutsch. Geol. Ges., LVI, Protok., 67-91, 8 text-figs.

Abstracts in Geol. Centralbl., VI, 237; Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 146.

—— 1906 A

Über *Archæophis proavus* Mass., eine Schlange aus dem Eocän des Monte Bolca.

Beitr. Pal. Geol. Oesterr.-Ung., XIX, 1906, 133, pls. i, ii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 294; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 164.

—— 1906 B

Pterosphenus scheinfurthi Andrews und die Entwicklung der Palaeophiden.

Arch. Biontol., I, 307-350, pls. xxvi-xxvii, 3 text-figs.

There is a bibliogarphy of 29 titles.

Abstracts in Sci. Progress, II, 516; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 440; Rev. crit. Paléozool., XII, 60; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 171.

—— 1914 A

Bericht über den Verlauf der Tendaguru Expedition.

Arch. Biontol., III, 17-58, 17 figs.

—— 1914 B

Uebersicht über die Wirbelthierfauna der Tendaguru-Schichte, nebst einer kurzen Charakterisierung der neuaufgestellten Arten von Sauropoden.

Arch. Biontol., III, 81-110, figs. 1-12.

—— 1920 A

Ueber *Elaphosaurus bambergi* und die Megalosaurier aus den Tendaguru Schichten Deutch-Ostafrikas.

Sitz.-Ber. naturf. Freunde Berlin, 1920, 225-235, 7 figs.

—— 1922 A

Das Handskelett von *Gigantosaurus brancai* aus den Tendaguru-Schichten Deutsch-Ostafrikas.

Centralbl. Min. Geol. Pal., 1922, 464-480, 7 figs.

Abstract in Geol. Zentralbl., XXIX, 187.

—— 1925 A

Die Cœlurosaurier und Theropoden der Tendaguru-Schichten Deutsch-Ostafrikas.

Palaeontgr. Suppl., VII, 1-99, pls. i-x, 23 text-figs.

The bibliography presents 28 titles.

Janensch, William—Continued 1925 B

Ein aufgestelltes Skelett des Stegosauriers *Kentrosaurus æthiopicus* E. Hennig aus den Tendaguru-Schichten Deutsch-Ostafrikas.

Palæontogr. Suppl., VII, 257-276, pls. XV, XVI.

—— 1926 A

Dinosaurier-Reste aus Mexiko.

Centralbl. Min. Geol. Pal., 1926, Abt. 6, 192-197, 2 figs.

Jaques, H. E. 1922 A

Some proboscidian remains found in Henry County.

Proc. Iowa Acad. Sci., 1921 (1922), XXVIII, 65-68, 5 figs.

Jaquet, Maurice 1897 A

Contribution à l'anatomie comparée des systèmes squelettaire et musculaire *de Chimæra collei, Callorhynchus antarcticus, Spinax niger, Protopterus annectens, Ceratodus forsteri* et *Axolotl.*

Arch. Sci. Med., II, 174-206, pls. v-viii.

—— 1898 A

Recherches sur l'anatomie et l'histologie du *Silurus glanis* L.

Arch. Sci. Med. III, 101-152; 213-229, pls. i-xiii; xvi-xxii.

The first part of this treatise deals with the osteology.

—— 1898 B

Contribution à l'anatomie comparée des systèmes squelettaire et musculaire de *Chimæra collei, Callorhynchus antarcticus, Spinax niger, Protopterus annectens, Ceratodus forsteri* et *Axolotl.*

Ann. Sci. Med., III, 300-340, pls. xxiv-xxix.

—— 1899 A

Recherches sur l'anatomie et l'histologie du *Silurus glanis* L.

Arch. Sci. Med., IV, 177-188, pls. xxxiv-xl.

—— 1899 B

Contribution à l'anatomie comparée des systèmes squelettaire et musculaire de *Chimæra collei, Callorhynchus antarcticus, Spinax niger, Protopterus annectens, Ceratodus forsteri* et *Axolotl.*

Ann. Sci. Med., IV, 189-225, pls. xli-xlv.

This paper deals with the anatomy of the axolotl.

Jaquet, Maurice—Continued 1899 C

Contribution à l'anatomie comparée des systèmes squelettaire et musculaire de *Chimæra collei, Callorhynchus antarcticus, Spinax niger, Protopterus annectens, Ceratodus forsteri* et *Axolotl.*

Ann. Sci. Med., IV, 241-273, pls. xlvi-li.

This paper deals with the anatomy of *Ceratodus.*

—— 1900 A

Contribution à l'anatomie comparée des systèmes squelettaire et musculaire de *Chimæra collei, Callorhynchus antarcticus, Spinax niger, Protopterus annectens, Ceratodus forsteri* et *Axolotl.*

Arch. Sci. Med., V, 61-89, pls. i-vi.

Jardine, William 1853 A

The geology of Annandale, or illustrations of footmarks impressed on the New Red sandstone of Corncockle Muir.

Folio, 1-17, pls. i-xiii, and figure of the quarry.

Jasswoin, G. 1924 A

On the structure and development of the enamel in mammals.

Quart. Jour. Micr. Sci., LXIX, 97-118, pl. vi, 2 text-figs.

The bibliography contains 23 titles.

Jaworski, Zygmunt 1924 A

Kraniologische Untersuchung der Pferdeschädel aus Polesie.

Bull. Acad. Sci. Cracovie, 1924 (1925), 525-537.

In the bibliography are 12 titles.

Jayne, Horace 1898 A

Mammalian anatomy. The skeleton of the cat.

Pages 816, with 611 figures and many tables of measurements.

Jefferson, Thomas 1787 A

Notes on the State of Virginia, written by Thomas Jefferson. Illustrated with a map, including the States of Virginia, Maryland, Delaware and Pennsylvania.

London, 1787, 8vo., i-ii+1-382 pages.

Jenkinson, J. W. 1911 A

The development of the ear-bones in the mouse.

Jour. Anat., Physiol., London, XLV, 305-318, 8 figs.

The bibliography presents 7 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 60.

Jepsen, Glenn L. 1926 A

The oldest known cat, *Hoplophoneus oharrai.*

The Black Hills Engineer, XIV, 1-6, pl. i, text-fig. 1.

Jillson, Willard Rouse 1917 A

Preliminary note on the occurrence of vertebrate footprints in the Pennsylvanian of Oklahoma.

Amer. Jour. Sci. (4), XLIV, 56-58, 1 fig. Abstract in Geol. Centralbl., XXV, 44. No systematic name is given the tracks.

Jochelson, Waldemar 1909 A

Some notes on the traditions of the natives of northeastern Siberia about the mammoth.

Amer. Naturalist, XLIII, 48-50.

Johnson, Alice 1883 A

On the development of the pelvic girdle and skeleton of the hind limb in the chick.

Quart. Jour. Micr. Sci. (n.s.), XXIII, 399-411, pls. XXVI, XXVII.

Johnston, H. W. 1905 A

The scales of Tay salmon as indicative of age, growth, and spawning habit.

Rep. Fish. Board Scotland, XXIII, pt. II, app. II, 63-71, pls. i-vi, 1 diagram.

—— 1907 A

The scales of salmon.

Rep. Fish. Board Scotland, XXV, pt. II, app. II, 54-66, pls. i-v.

—— 1910 A

The scales of salmon.

Rep. Fish. Board Scotland, XXVIII, pt. II, app. II, 21-24, 1 pl.

Johnston, W. A. 1917 A

Pleistocene and recent deposits in the vicinity of Ottawa, with a description of the soils.

Canad. Geol. Surv. Dept. Mines, Mem. 101 (Geol. Ser. No. 84), i-ii; 1-69, 1 map, 8 pls.

Joleaud, L. 1919 A

Les migrations des mammifères américains et africains a travers les régions atlantiques pendant les temps néogènes.

Rev. gén. Sci. Paris, XXX, 704-712, 9 maps. Reviewed in Jour. Mamm., II, 190-192. Abstract in Rev. crit. Paléozool., XXIV, 39-44.

Joleaud, L.—Continued 1919 B

Relations entre les migrations du genre *Hipparion* et les connexions continentales de l'Europe, de l'Afrique et de l'Amerique au Miocène supérieur.

C. R. Acad. Soc. Paris, CLXVIII, 177-179. Abstracts in Rev. crit. Paléozool., XXIV, 39-44; Neues Jahrb. Min. Geol. Pal., 1923, I, 310-311.

—— 1919 C

Sur les migrations à l'époch néogène des *Hipparion,* des hippotraginés et des tragélaphinés.

C. R. Acad. Sci. Paris, CLXVIII, 310-312. Abstracts in Rev. crit. Paléozool., XXIV, 39-44; Neues Jahrb. Min. Geol. Pal., 1923, I, 310-311.

—— 1919 D

Sur les migrations des genres *Hystrix, Anchitherium* et *Mastodon* à l'époch néogènes.

C. R. Acad. Sci. Paris, CLXVIII, 412-414. Abstracts in Rev. crit. Paléozool., XXIV, 39-44; Neues Jahrb. Min. Geol. Pal., 1923, I, 310-311.

—— 1920 A

Revue de paléontologie animale.

Rev. gen. Sci. Paris, XXXI, 487-500, 11 figs.

—— 1920 B

Studies in paleopathology.

Rev. crit. Paléozool., XXIV, 85-87. (A review of 11 of R. C. Moodie's papers.)

—— 1920 C

Review of Troxell's "Vertebrate fossils of Rock Creek, Texas" (Troxell, R. L., 1915 A).

Rev. crit. Paléozool., XXIV, 91-92.

—— 1920 D

Review of Dice's "Systematic position of several American Tertiary lagomorphs."

Rev. crit. Paléozool., XXIV, 98.

Joly, G. 1898 A

De la solipédisation des équidés dans les temps actuels.

C. R. Acad. Sci. Paris, CXXVI, 1579-1581.

Jones, J Claude 1925 A

The geologic history of Lake Lahontan.

Carnegie Instn. Wash., Publ. No. 352, 1-50, pls. i-vi, 8 text-figs., and a map.

—— 1928 A

The age of Lake Lahontan.

Geol. Soc. Amer. (Cordill. Sec.), 27th meet. Berkley. List of papers with abstracts, 7.

Joor, Joseph F. 1895 A

Notes on a collection of archæological and geological specimens collected in a trip to Avery's Island (Petite Anse), Feb. 1, 1890.

Amer. Naturalist, xxix, 394-398.

Jordan, David Starr 1885 A

Subclass II: Teleostei.

Stand. Nat. Hist., iii, 98-173, figs. 72-107.

—— 1898 A

Agassiz on recent fishes.

Amer. Naturalist, xxxii, 173-176.

—— 1901 A

The fish fauna of Japan, with observations on the geographical distributions of fishes.

Science (n.s.), xiv, 545-567.

For remarks see Science (n.s.), xiv, 694; Science (n.s.), xiv, 936.

—— 1902 A

The history of ichthyology.

Science (n.s.), xvi, 240-258.

—— 1903 A

Hay on fossil vertebrates.

Amer. Naturalist, xxxvii, 135-137.

—— 1904 A

Boulenger on the classification of bony fishes.

Amer. Naturalist, xxxviii, 597-599.

—— 1905 A

A guide to the study of fishes.

Henry Holt and Company, New York, 4to, i, i-xxvi+1-624 pages, colored frontispiece, and 393 figures; vol. ii, i-xxii+1-599 pages, colored frontispiece, 113 figures.

For reviews see Nature, lxxii, 625-626; Science (n.s.), xxii, 861-865.

—— 1905 B

The origin of species through isolation.

Science (n.s.), xxii, 545-562.

—— 1905 C

Ontogenetic species and other species.

Science (n.s.), xxii, 872-873.

—— 1907 A

The fossil fishes of California; with supplementary notes on other species of extinct fishes.

Bull. Dept. Geol., Univ. Calif., v, 95-145, pls. xi, xii; 33 text-figs.

Abstracts in Geol. Centralbl., xii, 227; Neues Jahrb. Min. Geol. Pal., 1908, ii, Ref., 443; Rev. crit. Paléozool., xii, 13-14.

Jordan, David Starr—Continued 1907 B

Fishes.

Henry Holt and Co., New York. Amer. Nature series. 4to, i-xvi+1-789 pages, 18 colored plates, 673 illustrations.

For a review see *The Nation,* vol. 86, 1908, 290.

—— 1908 A

Note on a fossil stickleback fish from Nevada.

Smithson. Misc. Coll., li, 117.

—— 1908 B

Ichthyology.

Amer. Naturalist, xlii, 800-811.

—— 1909 A

Ichthyology.

Amer. Naturalist, xliii, 559-567.

—— 1910 A

Description of a collection of fossil fishes from the bituminous shales at Riacho Doce, state of Alagoas, Brazil.

Ann. Carnegie Mus., vii, 23-34, pls. v-xiii.

—— 1910 B

Notes on ichthyology.

Amer. Naturalist, xliv, 178-191; 634-639.

—— 1911 A

Notes on ichthyology.

Amer. Naturalist, xlv, 430-439.

—— 1913 A

Ellimma, a genus of fossil herrings.

Proc. Biol. Soc., Wash., xxvi, 79.

—— 1917 A

The genera of fishes. Pt. I. See Jordan and Evermann, 1917 A.

—— 1919 A

Fossil fishes of southern California. I: Fossil fishes of the Soledad deposits.

Stanf. Univ. Publ. Univ. Ser., 1-12, pls. i-vi.

—— 1919 B

The genera of fishes. Pt. II: From Agassiz to Bleaker, 1833-1858, twenty-six years, with the accepted type of each.

Stanf. Univ. Publ. Univ. Ser., lxii, i-ix+1-284 pages, i-xiii pages.

—— 1919 C

Temperature and vertebræ in fishes, a suggested test.

Science (n.s.), xlix, 336-337.

Jordan, David Starr—Continued 1919 D

The genera of fishes. Pt. III: From Guenther to Gill, 1859-1880, Twenty-two years, with the accepted type of each.

Stanf. Univ. Publ. Univ. Ser. LXII, 285-410+i-xv pages.

—— 1920 A

A Miocene catastrophe.

Nat. Hist., XX, 18-22, 5 figs.

Reprinted in *Guide to Nature*, XIII, 1921, 132.

—— 1920 B

An ancient moonfish.

Scient. Monthly, XI, 470-473, 3 figs.

—— 1920 C

The genera of fishes. Pt. IV: From 1881 to 1920, thirty-nine years, with the accepted type of each.

Stanf. Univ. Publ. Univ. Ser., 411-576+i-xviii.

—— 1921 A

The fish fauna of the California Tertiary.

Stanf. Univ. Publ. Univ. Ser. Biol. Sci., I, No. 4, 237-300, pls. i-lvii.

Noticed in Amer. Jour. Sci. (5), II, 354.

—— 1921 B

The Miocene shore-fishes of California.

Scient. Monthly, XIII, 460-464, 4 figs.

—— 1922 A

Description of a new species of fossil herring, *Quisque bakeri*, from the Texas Miocene.

Amer. Jour. Sci. (5), III, 249-250, 2 figs.

Abstract in Geol. Zentralbl., XXVIII, 186.

—— 1922 B

Some sharks' teeth from the California Pliocene.

Amer. Jour. Sci. (5), III, 338-342, 3 figs.

Abstract in Geol. Zentralbl., XXIX, 253.

—— 1922 C

Geographical isolation and the origin of species.

Bijdr. Dierk. Amsterdam, XXII (Feestnum. Max Weber), 175-178.

—— 1922 D

Restorations figuring Miocene fishes.

Nat. Hist., XXII, 271-274, 9 figs.

—— 1923 A

A classification of fishes, including families, and genera as far as known.

Stanf. Univ. Publ. Univ. Ser. Biol. Sci., III, No. 2, 79-243+i-x.

Jordan, David Starr—Continued 1924 A

Description of a recently discovered sculpin from Nevada regarded as *Cottus beldingi*.

Proc. U. S. Nat. Mus., LXV, art. 6, 1-2, pl. i.

—— 1924 B

Miocene fishes from Southern California.

Bull. So. Calif. Acad. Sci., XXIII, 42-50, pls. F-L.

—— 1925 A

A collection of fossil fishes in the University of Kansas from the Niobrara formation of the Cretaceous.

Kansas Univ. Sci. Bull., XV, No. 2 (XXV, No. 2), 219-234, pls. xiii-xxiii.

This paper is dated December, 1924; it was issued apparently late in 1925 or early in 1926.

—— 1925 B

The fossil fishes of the Miocene of southern California.

Stanf. Univ. Publ. Univ. Series, Biol. Sci., IV, No. 1, 1-51, pls. i-xxi.

—— 1926 A

Ein unglückliches Versehen.

Zool. Anz., LXVIII, 7-8.

—— 1926 B

New sharks from the Temblor group in Kern County, California.

Proc. Calif. Acad. Sci. (4), XV, 257-261, pl. xxvi.

—— 1927 A

A confusing error.

Copeia, No. 161, Jan. 13, 1927, 190-191.

—— 1927 B

The fossil fishes of the Miocene of southern California, Contrib. ix.

Stanf. Univ. Publ. Univ. Ser. Biol. Sci., V, No. 2, 85-99 (reprint pages 1-15), pls. i-iv.

—— 1927 C

Kindleia: A new genus of cichlid fishes from the Upper Cretaceous of Alberta.

Canad. Field-Naturalist, XLI, 145-147, figs. i-xiv.

—— 1928 A

Note on *Carcharias, Carcharinus,* and *Carcharodon.*

Copeia, No. 166, 1-4.

Jordan, David Starr, and Carl Hugh **Beal** 1913 A

Supplementary notes on fossil sharks.

Bull. Dept. Geol., Univ. Calif., VII, 243-256, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 156-157; Geol. Centralbl., XX, 707; Rev. crit. Paléozool., XVIII, 7.

——, and B. W. **Evermann** 1917 A

The genera of fishes from Linnæus to Cuvier, 1758-1833, seventy-five years, with the accepted type of each. A contribution to the stability of scientific nomenclature.

Stanf. Univ. Publ. Ser., 1-161.

—— —— 1926 A

A review of the giant mackerel-like fishes, tunnies, spearfishes and swordfishes.

Occ. Papers Calif. Acad. Sci., XII, 3-113, pls. i-xx.

——, and C. H. **Gilbert** 1882 A

Synopsis of the fishes of North America.

Bull. U. S. Nat. Mus., XVI, i-lvi+1-1018 pages.

Review in Rep. Smithson. Instn., 1885 (1886), 787-789.

Jordan, D. S., and J. Z. **Gilbert** 1919 A

Fossil fishes of southern California. II: Fossil fishes of the (Miocene) Monterey formations of southern California. III: Fossil fishes of the Pliocene formations.

Stanf. Univ. Publ. Univ. Ser., 13-64, pls. vii-xxxi.

—— —— 1920 A

The fossil fishes of the diatom beds of Lompoc, California.

Stanf. Univ. Publ. Univ. Ser., 1-45, pls. i-xxix.

——, and H. **Hannibal** 1923 A

Fossil sharks and rays of the Pacific slope of North America.

Bull. So. Calif. Acad. Sci., XXII, 27-63, pls. i-x.

——, and C. L. **Hubbs** 1919 A

A monographic review of Atherinidæ, or silversides.

Stanf. Univ. Publ. Univ. Ser., XL, 1-87, pls. 1-xii.

Juhn, Mary 1923 A

Die Entwicklung des Sternums bei *Lacerta*.

Acta. Zool., IV, 65-110, 1 pl., 28 text-figs.

The bibliography embraces 48 titles.

Julien, Alexis 1894 A

De la coexistence du sternum avec l'épaule et le poumon.

C. R. Acad. Sci. Paris, CXIX, 173-175.

Jungerson, Hector F. E. 1910 A

The structure of the Aulostomidæ, Syngnathidæ and Solenostomidæ.

Danske Vid. Selsk. Skr. (7), VIII, 269-364, pls. i-vii.

There is a bibliography of 59 titles.

—— 1910 B

On the osteology of the Lophiobranchii.

Rep. Brit. Assoc. Adv. Sci., 79th meet., Winnipeg, 1909, 503-504.

Kaempfert, Waldemar 1927 A

Ground man or ape man—what are we?

N. Y. Times Mag., Jan. 23, 1927, 8-9; 16, 6 figs.

An exposition of Prof. H. F. Osborn's views on the origin of man.

Kampfen, P. N. van 1905 A

Die Tympanalgegend des Säugetierschädels.

Morphol. Jahrb., XXXIV, 321-722, 96 figs.

There is a bibliography of 272 citations.

—— 1907 A

Die Anheftung des Zungenbeins am Schädel bei *Putorius putorius* L.

Zool. Anz., XXXI, 695-696, 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 62.

—— 1922 A

Parasphenoid und basitemporale der Säugethiere.

Bijdr. Dierk. Amsterdam, XXII (Feestnum. Max Weber), 53-58, 1 fig.

References to literature in foot-notes.

Kandern, Walter 1905 A

Der Polarwolf (*Canis occidentalis* var. *albus* Sabine).

Zool. Jahrb. Syst., XXI, 467-478, text-figs. A-D.

—— 1910 A

Ueber einige Aehnlichkeiten zwischen *Tupaja* und den Halbaffen.

Anat. Anz., XXXVII, 561-573, 7 text-figs.

Kapelkin, W. 1900 A

Zur Frage über die Entwicklung des axialen Skelets der Amphibien.

Bull. Soc. Natural. Moscou, for 1900 (n.s.), XIV *bis*, 433-448, pls. v, vi.

Appended is a bibliography of 24 titles.

Karpinsky, A. P. 1899 B
On the remains of edestids and the new genus *Helicoprion*.
Mém. Acad. Sci. St. Pétersb. (7), VIII, art. 7, 1-67, pls. i-iv, 73 text-figs.
A copious bibliography is presented in foot-notes. The text is in Russian.

—— 1902 A
Ueber die Reste von Edestiden und die neue Gattung *Helicoprion*.
Bull. Soc. belge Géol. (2), XIII, Proc.-verb., 205-215, pl. C, 9 text-figs.

—— 1903 A
On the occurrence of the genus *Campodus* of Koninck in the arctinskian deposits of Russia.
Verh. min. Ges. St. Pétersb. (2), XLI, Prot., 32-37, 5 text-figs.
The text is in Russian.

—— 1911 A
Notes sur l'*Helicoprion* et les autres Édestides.
Bull. Acad. Sci. St. Petersb. (6), v, 1105-1122, 6 text-figs.
This paper is printed in Russian. Karpinsky, A. P., 1912 A, is a translation of it.
Abstract in Geol. Centralbl., XX, 69.

—— 1912 A
On *Helicoprion* and other Edestidæ.
Verh. min. Ges. St. Petersb. (2), XLIX, 69-94, 6 text-figs.
The text is in English. Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 475-476.

—— 1915 A
Notice sur la nature de l'organe hélicoïdal du *Helicoprion*.
Bull. Soc. Sci. nat. Erkat., XXXV, 117-145, 1 pl., 17 text-figs.
Text in Russian and French. Abstract in Geol. Mag. Lond. (6), III, 373.

—— 1916 A
On a new species of *Helicoprion* (*Helicoprion clerci*, n. sp.).
Bull. Acad. Sci. Pétrograd. (6), X, 701-708, 5 text-figs.
Text in Russian. Abstract in Geol. Mag. Lond. (6), III, 373.

—— 1922 A
Helicoprion ivanovi n. sp.
Bull. Acad. Sci. Russ. (VI), XVI, 369-378, 4 figs.

—— 1922 B
Notice sur les segments dentaires des édestides et leur orientation.
Bull. Acad. Sci. Russ. (6), XVI, 379-388, 11 figs.

Karpinsky, A. P.—Continued 1925 A
Sur une nouvelle trouvaille de restes de *Parahelicoprion* et sur les relations de ce genre avec *Campodus*.
Soc. géol. Belgique. Livre jubilaire, 1874-1924, 127-137, 19 text-figs.

Kasaneff, W. 1906 A
Ueber die Entsehung des Hautpanzers bei *Syngnathus acus*.
Zool. Anz., XXX, 854-861, 6 figs.

Kasper, Ad. 1903 A
Ueber den Atlas und Epistropheus bei den pleurodiren Schildkröten.
Arb. zool. Inst. Wien, XIV, 137-172 (1-36), pl. i, 5 text-figs.
There is a bibliography of 8 titles.

Kastchenko, N. 1901 A
Squelette du mammouth qui porte les traces de ce que certaines parties du corps de cet animal servaient de nourriture à l'homme contemporain.
Mém. Acad. Sci. St. Pétersb. (8), XI, art. 7, 1-60, pls. i-viii.
This paper is printed in Russian.

Kathariner, Ludwig 1899 A
Findet sich eine "Trägerfunction" der paarigen Flossen nur bei den Dipnoern?
Zool. Anz., XXII, 345-346.

—— 1913 A
Die Lederschildkröte (*Dermochelys coriacea* L.) eine aussterbende Tierform.
Naturw. Wochenschr. (n.s.), XII (XXVIII), 369-373, 4 text-figs.

Kaup, J. J. 1840 A
Notitzen über die fossilen sogenannten Grasfressenden Wale.
Neues Jahrb. Min. Geogn. Geol., 1840, 673-676.

—— 1853 A
Uebersicht der Lophibranchier.
Arch. Naturges., XIX, Bd. I, 226-234.

—— 1873 A
Ueber die Familie Triglidæ nebst einigen Worten über die Classification.
Arch. Naturges., XXXIX, Bd. I, 71-94.

Kay, G. F. 1921 A
Significance of the relation of proboscidean remains to the surface of Nebraskan gumbotil, near Osceola, Clarke County, Iowa.
Bull. Geol. Soc. Amer., XXXII, 80-83.

Kayser, E. 1880 A

Ueber *Dinichthys? eifeliensis* von Gerolstein.

Zeitschr. deutsch. Geol. Ges., XXXII, 817-818.

—— 1880 B

Ueber *Macropetalichthys.*

Zeitschr. deutsch. Geol. Ges., XXXII, 667-678.

Kehrer, F. A. 1896 A

Zur Phylogenie des Beckens.

Verh. Nat.-med. Ver., Heidelb. (N.F.), V, 346-359, pls. vii, viii.

Keith, Arthur 1902 A

The extent to which the posterior segments of the body have been transmuted and suppressed in the evolution of man and allied primates.

Jour. Anat. Physiol. Lond., XXXVII, 18-45, 4 text-figs.

—— 1911 A

Origin of mammals.

Nature, LXXXVIII, 294.

Keller, C. 1903 A

Zur Abstammungsgeschichte unserer Hunde-Rassen. Eine Abwehr gegenüber Herrn. Prof. Th. Studer.

Vierteljahrschr. naturf. Ges. Zurich, XLVIII, 440-457.

Kellicott, William Erskine 1905 A

The development of the vascular and respiratory systems of *Ceratodus.*

Mem. N. Y. Acad. Sci., II, 131-250, pls. ix-xiii, 106 text-figs.

There is presented a bibliography of 62 titles.

Abstract in Knowl. and Scient. News, II, 208.

Kellogg, Louise 1910 A

Rodent fauna of the late Tertiary beds at Virginia Valley and Thousand Creek, Nevada.

Bull. Dept. Geol. Univ. Calif., V, 421-437, 20 text-figs.

Abstracts in Geol. Centralbl., XV, 649-650; Rev. crit. Paléozool., XV, 84; Sci. Progress, V, 668.

—— 1911 A

A fossil beaver from the Kettleman Hills, California.

Bull. Dept. Geol., Univ. Calif., VI, 401-402, 1 text-fig.

Abstracts in Sci. Progress, VI, 558, 559; Geol. Mag. (5), IX, 278.

Kellogg, Louise—Continued 1912 A

Pleistocene rodents of California.

Bull. Dept. Geol., Univ. Calif., VII, 151-168, 16 text-figs.

Abstract in Geol. Centralbl., XIX, 650.

Kellogg, Remington 1918 A

A revision of the *Microtus californicus* group of meadow mice.

Univ. Calif. Publ. Zool., XXI, 1-42, 1 fig.

—— 1921 A

A new pinniped from the Upper Pliocene of California.

Jour. Mamm., II, 212-226, 13 figs.

Review in Rev. crit. Paléozool., XXVIII, 167, 1924.

—— 1922 A

Pinnipeds from the Miocene and Pleistocene deposits of California.

Bull. Dept. Geol., Univ. Calif., XIII, 23-132, 6 text-figs., one table.

An extensive bibliography of all the fossil species is presented.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 94-95; Geol. Zentralbl., XXX, 24; Neues Jahrb. Min. Geol. Pal., 1925, II, 97-98.

Review in Rev. crit. Paléozool., XXVII, 12.

—— 1922 B

A study of the Californian forms of the *Microtus montanus* group of the meadow mice.

Univ. Calif. Publ. Zool., XXI, 245-274, 25 figs.

The bibliography presents 21 titles.

—— 1922 C

A synopsis of the *Microtus mordax* group of meadow mice in California.

Univ. Calif. Publ. Zool., XXI, 275-302, pl. viii, 29 text-figs.

—— 1922 D

Description of the skull of *Megaptera miocœna,* a fossil humpback whale from the Miocene diatomaceous earth of Lompoc, California.

Proc. U. S. Nat. Mus., LXI, art. 14, 1-18, pls. i-iv, 10 text-figs.

Abstract in Rev. Geol. et Sci. conn., V, 122; in Rev. crit. Paléozool., XXVIII, 17, 1924.

—— 1923 A

Description of two squalodonts recently discovered in the Calvert cliffs, Maryland; and notes on the shark-toothed cetaceans.

Proc. U. S. Nat. Mus., LXII, art. 16, 1-69, pls. i-xx.

There are numerous citations of the literature.

Review in Rev. crit. Paléozool., XXVIII, 169, 1924.

Kellogg, Remington—Continued 1923 B

Description of an apparently new toothed cetacean from South Carolina.

Smithson. Contrib. Knowl., LXXVI, art. 7, 1-7, pls. i, ii.

Review in Rev. crit. Paléozool., XXVIII, 167, 1924.

Abstract in Geol. Zentralbl., XXX, 350; Nature, CXII, 806.

—— 1924 A

Description of a new genus and species of whalebone whale from the Calvert cliffs, Maryland.

Proc. U. S. Nat. Mus., LXIII, art. 15, 1-14, pls. i-vi.

Review in Rev. crit. Paléozool., XXVIII, 168, 1924.

—— 1924 B

A fossil porpoise from the Calvert formation of Maryland.

Proc. U. S. Nat. Mus., LXIII, art. 14, 1-39, pls. i-xviii.

Review in Rev. crit. Paléozool., XXVIII, 168, 1924.

—— 1924 C

Tertiary pelagic mammals of eastern North America.

Bull. Geol. Soc. Amer., XXXV, 755-766.

—— 1925 A

A fossil physeteroid cetacean from Santa Barbara County, California.

Proc. U. S. Nat. Mus., LVI, art. 27, 1-8, pls. i, ii.

—— 1925 B

Additions to the Tertiary history of the pelagic animals of the Pacific coast of North America.

Publ. Carnegie Instn. Wash., No. 348, 1-120, pls. i-xiii, 29 text-figs.

—— 1925 C

On the occurrence of remains of fossil porpoises of the genus *Eurhinodelphis* in North America.

Proc. U. S. Nat. Mus., LXVI, art. 26, 1-40, pls. i-xvii, 4 text-figs.

References to quoted literature in footnotes.

—— 1925 D

The relationships of the Tertiary cetaceans of Jugo-Slavia to those of eastern North America.

Exemplar e xeniis Gorjanovic-Krambergerianis separatim impressum, 1-8, Zagreb, 1925.

Kellogg, Remington—Continued 1926 A

Supplementary observations on the skull of the fossil porpoise *Zarhachis flagellator*.

Proc. U. S. Nat. Mus., LXVII, art. 28, 1-5, pls. i-v.

—— 1926 B

Report on palæontological researches. Studies on the relation of sense organs to the general problem of aquatic adaptation.

Publ. Carnegie Instn., Wash. Year-book, No. 25, 405-407.

—— 1927 A

Kentriodon pernix, a Miocene porpoise from Maryland.

Proc. U. S. Nat. Mus., LXIX, art. 19, 1-55, i-xiv, 20 text-figs.

—— 1927 B

Study of the skull of a fossil sperm-whale from the Temblor Miocene of southern California.

Publ. Carnegie Instn. Wash., No. 346, 1-22, pls. i-ix.

—— 1927 C

Fossil pinnipeds from California.

Publ. Carnegie Instn. Wash., No. 346, 27-37, 8 figs.

—— 1928 A

The history of whales—their adaptation to life in the water.

Quart. Rev. Biol., III, 29-76, 11 figs.

The bibliography records 120 titles.

—— See also **Gregory** and **Kellogg**.

Kemna, A. 1902 A

[Remark on *Helicoprion*.]

Bull. Soc. belge Géol. (2), XIII, Proc.-verb. 1899 (1902), 233-234.

—— 1903 A

Les récentes découvertes de poissons fossiles primitifs.

Bull. Soc. belge Géol., XVII, 1903, Mém., 339-382, 18 text-figs.

Abstract in Geol. Centralbl., VII, 729.

—— 1904 A

Les récentes découvertes de poissons fossiles primitifs.

Bull. Soc. belge Géol. Mém., XVIII, 3-78, 15 text-figs.

Abstract in Geol. Centralbl., VII, 498.

Kennedy, W. 1893 A

Report on Grimes, Brazos, and Robertson Counties [Texas].

Geol. Surv. Texas, IV, 1-84, with maps.

Kerbert, Coenraad 1876 A
Ueber die Haut der Reptilien und anderer Wirbelthiere.
Arch. mikr. Anat. Bonn, XIII, 205-262, pls. xviii-xx.

Kermode, Francis 1916 A
Report on palæontology.
Rep. Prov. Mus. Nat. Hist. Victoria, for 1915 (1916), 21.

—— 1917 A
Report on palæontology.
Rep. Prov. Mus. Nat. Hist. Victoria, for 1916 (1917), 42-43, pl. ix.

Kernan, John D. 1918 A
The skull of *Ziphius cavirostris*.
Bull. Amer. Mus. Nat. Hist. Victoria, XXXVIII, 349-394, pls. xx-xxxii.
The bibliography presents 35 titles.

Kerr, J. Graham 1900 A
Note on hypotheses as to the origin of the paired limbs of vertebrates.
Proc. Cambridge Philos. Soc., X, 227-235.

—— 1900 B
The zoological position of *Palæospondylus* Traquair.
Proc. Cambridge Philos. Soc., X, 298-299.

—— 1901 A
The origin of the paired limbs of vertebrates.
Rep. Brit. Assoc. Adv. Sci., LXXI, Glasgow, 693-695.

—— 1901 B
The development of *Lepidosiren paradoxa*. Part II. With a note on the corresponding stages in the development of *Protopterus annectens*.
Quart. Jour. Micr. Sci., XLV, 1-40, pls. i-iv, 5 text-figs.
This paper deals with the early stages of development.

—— 1902 A
The development of *Lepidosiren paradoxa*. Part III. Development of the skin and its derivatives.
Quart. Jour. Micr. Sci., XLVI, 417-459, pls. xxv-xxviii, 3 text-figs.

—— 1908 A
Note on the autostylic skull of vertebrates.
Proc. Roy. Phys. Soc. Edinb., XVII, 169.

—— 1908 B
Note on the swim-bladder and lungs.
Proc. Roy. Phys. Soc. Edinb., XVII, 170-174, 2 figs.

Kerr, J. Graham—Continued 1910 A
Morphological method and the ancestry of vertebrates.
Nature, LXXXV, 203-205.

—— 1923 A
Palæontology and archaic fishes.
Nature, CXI, 113-114.

Kessler, Karl T. 1841 A
Osteologie der Vogelfüsse.
Bull. Soc. Natural. Moscou, 1841, 467-508, 626-706, pl. x.

Kesteven, H. Leighton 1910 A
The anatomy of the head of the green turtle, *Chelone midas*, Latr. Part I: The skull.
Jour. Proc. Roy. Soc. N. S. Wales, XLIV, 368-400, pls. xx-xxxiii.

—— 1916 A
The relation of the amphibian parasphenoids.
Jour. Anat. Physiol. Lond., L, 303-307.

—— 1918 A
The homology of the mammalian alisphenoid and of the *Echidna*-pterygoid.
Jour. Anat. Physiol. Lond., LII, 449-466, 10 figs.

—— 1919 A
The pterygoids in Amphibia and reptiles and the parasphenoids.
Jour. Anat. Lond., LIII, 223-238, 23 figs.

—— 1922 A
A new interpretation of the bones in the palate and upper jaw of fishes.
Jour. Anat. Lond., LVI, 307-324, 5 figs.
There is a bibliography of 15 titles.

—— 1925 A
Contributions to the cranial osteology of the fishes.
Rec. Austral. Mus., XIV, 271-288, figs. 1-5.
The bibliography comprises 7 titles.

—— 1926 A
Same general title as in preceding. Pt. II: The maxillæ in the eels and the identification of these bones in the fishes generally.
Rec. Austral. Mus., XV, 132-140, 8 figs.
The bibliography comprises 12 titles.

—— 1926 B
Same general title as in preceding. Pt. III: The teleostome skull; an attempt to provide an ichthyological nomenclature.
Rec. Austral. Mus., XV, 201-236, 15 figs.

Keuchenius, P. E. 1913 A
Über die Herkunft von Sporn und Kastanie der Equidæ.
Zool. Anz., XLI, 446-451.

Keyes, C. R. 1888 B
On some fossils from the lower Coal Measures at Des Moines, Iowa.
Amer. Geologist, II, 23-28.

—— 1889 A
Notes on the distribution of certain loess fossils.
Amer. Geologist, IV, 119-121.

—— 1897 A
List of Carboniferous fossils from Des Moines [Polk County, Iowa].
Iowa Geol. Surv., VII, 330-335.

—— 1922 A
Three grand discoveries of life.
Pan-Amer. Geol., XXXVII, 1-14, pls. ii, iii.

—— 1924 A
Saint John and the fishes.
Pan-Amer. Geol., XLII, 233-235.

Khomenko, J. 1913 A
La faune méotique du village Taraklia du district de Bendery. 1: Les ancêtres des Cervinæ contemporains et fossiles. 2: Giraffinæ et Cavicornia.
Annuaire Geol. Min. Russie, XV, 107-143, pls. vi-ix.
The paper is printed in Russian (107-132), but there is a résumé (132-143), in French.

Kiaer, Johan 1915 A
Upper Devonian fish remains from Ellesmere Land, with remarks on *Drepanaspis*.
Rep. 2d Norweg. Arc. Exped. Fram., No. 33. 1-56, pls. i-viii, 8 text-figs.
Abstracts in Rev. crit. Paléozool., XXI, 57; Geol. Soc. Lond. (6), III, 372; Geol. Mag. (6), III, 372.

—— 1924 A
The Downtonian fauna of Norway. I: *Anaspida*. With a geological introduction.
Skr. Vid. selsk. Kristiania., I, No. 6, 1-139, pls. i-xiv, 50 text-figs.
The bibliography comprises 80 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, 284-286; Rev. Géol. et Sci. conn., 81-84.

—— 1928 A
The structure of the mouth of the oldest known vertebrates, pteraspids, and cephalaspids.
Palæobiol., I, 117-134, pls. xii, xiii, 7 text-figs.
The bibliography presents 23 titles.

Killian, Gustav 1891 A
Zur Metamerie des Selachierkopfes.
Verh. Anat. Ges., V, 85-107, 25 figs.

Kindle, E. M. 1914 A
An inquiry into the origin of "*Batrachioides antiquior*" of the Lockport dolomite of New York.
Geol. Mag. (6), I, 158-161, pls. viii, ix.

—— 1914 B
The Silurian and Devonian section of western Manitoba.
Summ. Rep. Geol. Surv. Canada (Dept. Mines) for 1912, 247-261.

—— 1914 C
Notes on the Oriskany sandstone and the Ohio shale of the Ontario peninsula.
Summ. Rep. Geol. Surv. Canada (Dept. Mines) for 1912, 286-290.

—— 1924 A
Note on a mammoth tusk from the Arctic Archipelago.
Amer. Jour. Sci. (5), VIII, 183-185, 3 figs.
Abstract in Geol. Zentralbl., XXXII, 507.

Kindred, J. E. 1919 A
The skull of *Amiurus*.
Univ. Ill. Biol. Mon., V, No. 1, 1-104. pls. i-viii.
The bibliography occupies pages 98 to 104.

—— 1921 A
The chondrocranium of *Syngnathus fuscus*.
Jour. Morph., XXXV, 425-456, 14 figs.
There is a bibliography of 12 titles.

—— 1924 A
An intermediate stage in the development of the skull of *Syngnathus fuscus*.
Amer. Jour. Anat., XXXIII, 421-440, pls. i-iii.
The bibliography cites 8 titles.

Kingsbury, B. F. 1895 A
The lateral line system of sense organs in some Amphibia, and comparison with the dipnoans.
Trans. Amer. Micr. Soc., XVII, 115-146, pls. i-v.
The bibliography cites 39 papers.

—— 1903 A
Columella auris and nervus facialis in the Urodela.
Jour. Comp. Neur., XIII, 313-334, 8 text-figs.

—— 1926 A
Branchiomerism and the theory of head segmentation.
Jour. Morphol. XLII, 83-107, 44 figs.
Appended is a bibliography of 50 titles.

Kingsbury, B. F., and H. B. **Adelmann** 1924 A

The morphological plan of the head.

Quart. Jour. Micr. Soc. (n.s.), LXVIII, 239-341, 8 figs.

In the literature cited are 70 titles.

——, and H. D. **Reed** 1908 A

The columella auris in Amphibia.

Anat. Record, II, 81-91, 7 text-figs.

—— —— 1909 A

The columella auris in Amphibia.

Jour. Morphol., XX, 549-628, pls. i-x.

There is appended a bibliography of 50 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 61-63.

Kingsley, J. S. 1884 A

Natural history of mammals. Sirenia.

Stand. Nat. Hist., V, 210-214.

—— 1885 A

Elasmobranchii, Ganoidea.

Stand. Nat. Hist., III, 68-89.

—— 1885 B

Lower vertebrates. Dipnoi.

Stand. Nat. Hist., III, 299-302, 3 figs.

—— 1892 A

The head of an embryo *Amphiuma*.

Amer. Naturalist, XXVI, 671-680.

The bibliography presents 16 titles.

—— 1894 A

The origin of the vertebrate skeleton.

Amer. Naturalist, XVIII, 635-640.

—— 1896 A

The segmentation of the head.

Marine Biol. Lab. Woods Hole, Lectures, 1895 (1896), 137-148.

—— 1897 A

Amphiuma and the cæcilians.

Science (n.s.), V, 436.

—— 1900 A

The ossicula auditûs.

Tufts Coll. Stud., VI, 203-274, 1 pl.

The bibliography occupies 13 pages.

—— 1900 B

The homologies of the ear bones.

Science (n.s.), XI, 167.

—— 1901 A

The origin of the mammals.

Science (n.s.), XIV, 193-205, text-figs. A-E.

Abstract in Geol. Centralbl., III, 58.

—— 1901 B

Amphibian studies.

Biol. Bull., II, 337-338.

—— 1902 A

The cranial nerves of *Amphiuma*.

Tufts Coll. Stud., I, art. VII, 293-321, pls. i-iii.

A bibliography of 39 titles.

Kingsley, J. S.—Continued 1902 B

The systematic position of the cæcilians.

Tufts Coll. Stud., II, No. 7, 323-344, pls. i-iii.

The bibliography consists of 62 titles.

—— 1905 A

The bones of the reptilian lower jaw.

Amer. Naturalist, XXXIX, 59-64, 7 text-figs.

—— 1912 A

A neglected point in the quadrate problem.

Proc. internat. Zool. Congr., VII, Boston, 1907, 185-186.

—— 1912 B

Comparative anatomy of vertebrates.

8vo., pages 1-401, with 346 illustrations.

Reviewed in Science (n.s.), XXXVII, 148-150. An edition was published in 1900. Reviewed in Nature, LXIII, 558-559. Another edition was published in 1917. Noted in Amer. Jour. Science (4), XLV, 240.

—— 1925 A

The vertebrate skeleton from the developmental standpoint.

8vo., Philadelphia. i-vi+1-337 pages, 324 illustrations.

The bibliography, pages 302-324, contains nearly 1,000 titles.

Kirkby, J. W. 1862 A

On the remains of fish and plants from the "Upper Limestone" of the Permian series of Durham.

Ann. Mag. Nat. Hist. (3), IX, 267-269.

—— 1864 A

On some remains of fish and plants from the "Upper Limestone" of the Permian series of Durham.

Quart. Jour. Geol. Soc., XX, 345-358, pl. xviii.

Kjellberg, Knut 1904 A

Beiträge zur Entwicklungsgeschichte des Kiefergelenks.

Morphol. Jahrb., XXXII, 159-184, 8 text-figs.

Klaatsch, H. 1893 B

Beiträge zur vergleichenden Anatomie der Wirbelsäule. I: Ueber den Urstand der Fischwirbelsäule.

Morphol. Jahrb., XIX, 649-680, pl. xvi, 1 text-fig.

The bibliography comprises 30 titles.

Klaatsch, H.—Continued 1893 C

Beiträge zur vergleichenden Anatomie der Wirbelsaüle. II: Ueber die Bildung knorpeliger Wirbelkörper bei Fischen.

Morphol. Jahrb., xx, 143-186, pl. vii, 6 text-figs.

—— 1901 A

Zur Deutung von *Helicoprion* Karp.

Centralbl. Min. Geol. Pal., 1901, 429-436, 2 text-figs.

Abstracts in Geol. Centralbl., II, 667; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 132.

—— 1901 B

Die wichtigsten Variationen am Skelet der freien unteren Extremität des Menschen und ihre Bedeutung für das Abstammungsproblem.

Anat. Hefte, Ergebn., x, 1900, 599-719, 34 text-figs.

—— 1913 A

Die Erwerbung der aufrechten Haltung und ihre Folgen.

Anat. Anz., Ergänzungsh., xliv, 161-188, 2 text-figs.

Klaauw, C. J. van der 1924 A

Über das Skelettstückchen von Paauw und den Verlauf der Chorda tympani bei einigen Marsupialia.

Anat. Anz., lvii, 240-246.

—— 1924 B

Bau und Entwickelung der Gehörknöchelchen.

Zeitschr., gesamte Anat. Ergeb., xxv, 565-622, 1 fig.

For the literature cited see pages 566-572.

Klatt, Berthold 1912 A

Über die Veränderung der Schädelkapazität in der Domestikation.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1912, 153-179, 9 text-figs.

Klein, E. F. 1868 A

Vergleichende Beschreibung des Schädels der Wirbelthiere.

Jahresh. Ver. Naturk. Württemb., xxiv, 71-171.

—— 1868 B

Der Kopf der Pleuronectæ.

Jahresh. Ver. Naturk. Württemb., xxiv, 271-308, pl. vi.

—— 1884 A

Beiträge zur Bildung des Schädels der Knochenfische.

Jahresh. Ver. Naturk. Württemb., xl, 129-257, pls. ii, iii.

Kleinschmidt, O. 1902 A

Ueber individuelles Variieren der Schädelform bei Eulen.

Verh. internat. Zool.-Kongr., Berlin, 1901, 640-641, 4 figs.

Klintz, Josef H. 1911 A

Die enchondrale Ossification bei den Amphibien (*Salamandra maculosa* Laur.).

Arb. Zool. Inst. Wien, xix, 165-193, pls. i, ii.

There is a bibliography of 44 titles.

Kneeland, Samuel 1854 A

On the odontoid process of the second cervical vertebra.

Proc. Bost. Soc. Nat. Hist., iv, 84.

Probably issued earlier.

Kner, R. 1860 B

Ueber den Flossenbau der Fische.

Sitz.-Ber. Akad. Wiss. Wien, xli, 807-824.

—— 1861 A

Ueber den Flossenbau der Fische (Fortsetzung).

Sitz.-Ber. Akad. Wiss. Wien, xlii, 232-260, 10 text-figs.; 759-786, text-figs. 11-24.

—— 1861 B

Ueber den Flossenbau der Fische.

Sitz.-Ber. Akad. Wiss. Wien, xliii, 123-125, text-figs.; 26-53 (Fortsetzung).

—— 1862 A

Ueber den Flossenbau der Fische (Schluss).

Sitz.-Ber. Akad. Wiss. Wien, xliv, 49-80, text-figs. 54-72.

Knight, Charles R. 1920 A

The woolly mammoth.

Nat. Hist., xx, 228, fig.

—— 1923 A

Restoration portrait of the Warren mastodon.

Nat. Hist., xxiii, frontispiece.

Knight, W. C. 1900 A

Abstract in Geol. Centralbl., II, 89.

—— 1900 B

The Wyoming fossil fields expedition of July, 1899.

Natn. Geogr. Mag., xi, 449-465, 8 ills.

—— 1903 A

Remains of elephants in Wyoming.

Science (n.s.), xvii, 828-829.

—— 1903 B

Some notes on the genus *Baptanodon*, with a description of a new species.

Amer. Jour. Sci. (4), xvi, 76-81, 3 text-figs.

Knipe, Henry R. 1912 A
Evolution in the past.
J. B. Lippincott Co., Phila., i-xv+1-242 pages, 56 plates.
Reviewed in Science (n.s.), XXXVI, 244-245, by W. J. Holland.

Knobel, E. Maud 1924 A
Some remarks on the pelvic bones of parrots.
Proc. Zool. Soc. Lond., 1924, 789-792, 4 figs.

Knopfli, Walter 1917 A
Beiträge zur Morphologie und Entwicklungsgeschichte des Brustschulterskelettes der Vögel.
Vierteljahrschr. naturf. Ges. Zurich, LXII, 49-58.

Knottnerus-Meyer, Theodor 1907 A
Über das Tränenbein der Huftiere. Vergleichendanatomischer Beitrag zur systematik der rezenten Ungulata.
Arch. Naturges., LXXIII, Bd. I, 1-152, pls. i-v, 32 text-figs.
There is appended a bibliography of 67 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 58.

—— 1910 A
Über die systematische Bedeutung des Tränenbeines für die Gattung *Bison*.
Zool. Anz., XXXV, 589-592.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 58.

—— 1911 A
Zur systematischen Bedeutung des Tränenbeines.
Zool. Anz., XXXVIII, 14-16.
Abstract in Jahresber, Anat. Entwickl. (N.F.), XV, pt. 3, 62.

Knowlton, Frank H. 1909 A
The stratigraphic relations and paleontology of the "Hell Creek beds," "Ceratops beds," and equivalents, and their reference to the Fort Union.
Proc. Wash. Acad. Sci., XI, 179-238.

—— 1909 B
Birds of the world. A popular account by Frank H. Knowlton, Ph.D. With a chapter on the anatomy of birds by Frederick A. Lucas. The whole edited by Robert Ridgway.
i-xiii+1-873 pages, with 16 colored plates and 233 figures.

—— 1911 A
Where are the Laramie dinosaurs?
Science (n.s.), XXXIV, 319-320.

Knowlton, Frank H.—Continued 1911 B
Further data on the stratigraphic position of the Lance formation ("Ceratops Beds").
Jour. Geol., XIX, 358-376, 3 text-figs.

—— 1911 C
Remarks on the fossil turtles accredited to the Judith River formation.
Proc. Wash Acad. Sci., XIII, 51-65.
Abstr. in Geol. Centralbl., XVII, 41-42.

—— 1911 D
Flora of the auriferous gravels of California.
U. S. Geol. Surv. Profess. Pap., LXXIII, 57-64.

—— 1914 A
Cretaceous-Tertiary boundary in the Rocky Mountain region.
Bull. Geol. Soc. Amer., XXV, 325-340.

—— 1922 A
The Laramie flora of the Denver Basin, with a review of the Laramie problem.
U. S. Geol. Surv. Profess. Pap., CXXX, 1-175, pls. i-xxviii.

Knox, Robert 1831 A
Observations to determine the dentition of the dugong; to which are added observations illustrating the anatomical structure and natural history of certain of the Cetacea.
Trans. Roy. Soc. Edinb., XI, 389-417.

Kobelt, W. 1900 A
Der Moschusochse.
Ber. Senckenb. naturf. Ges., 1900, Abh., 61-66, pl. vii, 1 text fig.

Koch, A. 1839 B
See Hay, O. P., 1902 A, p. 126.
Abstract in Neues Jahrb. Min. Geogn. Geol., 1840, 378.

—— 1845 C
Description of the *Hydrargos sillimanii* (Koch); a gigantic fossil reptile or sea serpent: Lately discovered March 1845.
Pages 1-24.

—— 1845 D
Description of *Hydrarchos harlani* (Koch): (The name *sillimanii* is changed to *harlani*, by the particular request of Professor Silliman). A gigantic fossil reptile: Lately discovered by the author in the State of Alabama. March 1845.
Second edition: pages 1-24.

Koch, Carl 1863 A
Das Wesentliche der Chiropteren.
Jahrb. Nassau Ver. Naturk., XVIII, 261-593, pls. i, ii.

Kölliker, A. 1860 A
Ueber das Ende der Wirbelsäule der Ganoiden und einiger Teleostier.
27 pages, 4 pls. Leipzig.
Abstract in Neues Jahrb. Min. Geol. Pal., 1862, 380-381.

—— 1860 C
Ueber den Bau der Säge des Sägefisches.
Wurzb. naturw. Zeitschr., I, 144-149.

Koenen, A. 1876 A
Ueber *Coccosteus bickensis.*
Zeitschr. deutsch. Geol. Ges., XXVIII, 667-668.

—— 1890 B
Hat *Coccosteus* vordere Ruderorgane?
Neues Jahrb. Min. Geol. Pal., 1890, II, 198-199.

König, Fritz 1910 A
Modell des rekonstruierten *Diplodocus.*
Verh. zool.-bot. Ges. Wien, LX, (146-150).

Königswald, Ralph 1925 A
Beitrag zur Kenntnis der Gattung *Ursavus* in Schwaben.
Centralbl. Min. Geol. Pal., 1925, 16-20, 6 figs.
There is a bibliography of 9 titles.

Köstlin, Otto 1844 A
Der Bau des knöchernen Kopfes in den vier Klassen der Wirbelthiere.
Stuttgart, 8vo., i-x+1-506 pages, pls. i-iv.

Kohlbrugge, J. H. F. 1902 A
Schädelmaasse bei Affen und Halbaffen.
Zeitschr. Morphol. Anthrop., IV, 318-344.

Koken, E. 1886 B
Über *Ornithocheirus hilsensis* Koken.
Zool. Anz., IX, 21-23.

—— 1887 B
Ueber das Quadratojugal der Lacertilier.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1887, 33-34.

—— 1888 B
See Hay, O. P., 1902 A, p. 128.
Review by Branco in Neues Jahrb. Min. Geol., etc., 1890, II, Ref., 324-325.
Abstract in Geol. Mag. (3), VII, 169.

—— 1889 B
Einige fossile Fisch-Otolithen.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1889, 117-121.

Koken, E.—Continued 1891 A
Abstract in Geol. Mag. (3), VIII, 475.

—— 1893 B
Die Vorwelt und ihre Entwickelungsgeschichte.
Leipzig, 8vo., i-viii+1-636 pages, 2 pls., 117 text-figs.

—— 1897 A
Über das Alter und die ursprüngliche Heimat des Mammuths.
Jahresh. Ver. Naturk. Württemb., LIII, ix-xi.

—— 1898 A
Abstract of Baur, G: The paroccipitale of the Squamata (Baur, G., 1896 A).
Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 141.

—— 1898 B
Abstract of H. Gadow: On the evolution of the vertebral column of Amphibia and Amniota (Gadow, H., 1896 A).
Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 142-143.

—— 1898 C
Abstract of Baur and Case: On the morphology of the skull of the Pelycosauria (Baur and Case, 1897 A).
Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 328-329.

—— 1899 A
Review of W. Dames: Über Brustbein, Schulter- und Beckengürtel der *Archæopteryx* (Dames, W., 1897 A).
Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 363-365.

—— 1899 B
Review of J. V. Rohon: Beiträge zur Classification der palaeozoischen Fische (Rohon, J. V., 1896 B).
Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 171-173.

—— 1900 A
Review of O. C. Marsh: The dinosaurs of North America (Marsh, O. C., 1896 C).
Neues Jahrb. Min. Geol. Pal., 1900, I, Ref., 462-464.

—— 1900 B
Abstract of M. Schlosser on Bären und bärenanlichen Formen (Schlosser, M., 1899 B).
Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 142-144.

Koken, E.—Continued 1900 C

Abstract of F. Broili on *Eryops megacephalus* (Broili, F., 1899 A).

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 144.

—— 1901 A

Helicoprion in Productus-Kalk der Saltrange.

Centralbl. Min. Geol. Pal., 1901, 225-227, 1 fig.

—— 1901 B

Palaeontologie und Descendenzlehre.

Verh. Ges. deutsch. Naturf, LXXIII, 1901, 213-228.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 85-87.

—— 1904 A

Review of Campbell Brown: Ueber das Genus *Hybodus* und seine systematische Stellung (Brown, C., 1900 A).

Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 304-305.

—— 1906 A

[Remarks on *Baptanodon.*]

Neues Jahrb. Min. Geol. Pal., 1906, I, 311.

—— 1907 A

Ueber *Hybodus.*

Geol. Pal. Abh. Jena (N.F), V, 1-18 (IX, 259-276), pls. i-iv (xi-xiv), 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 456-458; Rev. crit. Paléozool., XV, 85-87.

——, and H. **Linder** 1913 A

Osteologische Notizen über *Mureenosaurus.*

Neues Jahrb. Min. Geol. Pal., 1913, I, 101-115, pl. x, 11 text-figs.

Abstract in Geol. Centralbl., XX, 393-394.

Kollmann, J. 1884 A

Hohes Alter der Menschenrassen.

Zeitschr. Ethnol., XVI, 181-212.

The bibliography presents titles of 21 books and papers.

Kolmer, W. 1923 A

Ueber das Vorkommen eines Knochenmarkähnlichen Gewebes bei einem Selachier (Knorpelmark bei *Chimära monstruosa*).

Anat. Anz., LVI, 529-534, 2 figs.

Kolzoff, N. K. 1896 A

Das primäre Skelet der Bauchflossen der Teleostier.

Bull. Soc. Natural Moscou (n.s.), IX, 514-522, 12 figs.

Koninck, L. G. 1859 A

Sur la découverte d'ossements fossiles faite à Saint-Nicolas. Rapport de M. De Koninck.

Bull. Acad. Sci. Belgique (2), VIII, 109-123.

Korff, K. 1906 A

Ueber die Entwickelung der Zahnbein- und Knochengrundsubstanz der Säugetiere.

Anat. Anz. Ergänzungsh., XXIX, 132-136.

—— 1906 B

Die Entwicklung der Zahnbeingrundsubstanz der Säugetiere.

Arch. mikr. Anat. Bonn., LXVII, 1-17, pl. i.

Appended is a bibliography of 15 titles.

—— 1909 A

Entgegnung auf die v. Ebnersche Abhandlung "Ueber scheinbare und wirkliche Radiärfasern des Zahnbeins."

Anat. Anz., XXXV, 257-280, 8 text-figs.

—— 1914 A

Ueber den Geweihwechsel der Hirsche, besonders über den Knorpel und Knochenbildungsprocess der Substantia spongiosa der Baststangen.

Anat. Hefte, Abt. 1, XXII, 691-732, pls. xxiii, xxiv, 10 text-figs.

Kornhuber, A. 1901 A

Ueber eine neue fossile Eidechse aus den Schichten der unteren Kreideformation auf der Insel Lesina.

Verh. geol. Reichsanst., 1901, 147-153.

Koschkaroff, D. N. 1906 A

Beiträge zur Morphologie des Skelets der Teleostier. Das Skelet der Siluroidei.

Bull. Soc. Natural. Moscou (n.s.), XIX, 208-307, pl. v, 72 text-figs.

Kothe, Konrad 1910 A

Entwicklungsgeschichtliche Untersuchungen über das Zungenbein und die Ohrknöchelchen der Anuren.

Arch. Naturges., LXXVI, I, 29-66, pls. i, ii, 2 text-figs.

The bibliography presents titles of 42 papers.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 59-61.

Kotzebue, Otto von 1821 A

A voyage of discovery in the South Sea and Beering's Straits, for the purpose of exploring a north-east passage, undertaken in the year 1815-1818, etc.

English translation, London, 1821, 8vo., I, 187-240.

In this chapter is narrated (pp. 218-220), the discovery of mammoth bones on Eschscholtz Bay.

Kowalewsky, W. 1877 A

Osteologie des *Gelocus aymardi.*

Palaeontogr., XXI, XXII.

Kowarzik, Rudolf 1908 A

Der Moschusochs und seine Rassen.

Zool. Anz., xxxiii, 616-618.

Abstract in Naturw. Wochenschr., xxiv (N.F.), viii, 342.

—— 1909 A

Der Moschusochs im Diluvium Europas und Asiens.

Zool. Anz., xxxiii, 857-861.

Abstract in Geol. Centralbl., xiii, 494.

—— 1910 A

Der Moschusochs und seine Rassen. Mit einen Anhang: Moschusochsen in der Gefangenschaft.

Fauna arctica, v, erste Lief., 87-126, pl. i, 16 text-figs.

There are references to 67 works of writers on the subject.

—— 1911 A

Das Tränenbein von *Ovibos moschatus* Blainv.

Zool. Anz., xxxvii, 106-107.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 62.

—— 1912 A

Der Moschusochs im Diluvium Europas und Asiens.

Denk. Akad. Wiss. Wien, lxxxvii, 505-566, pls. i, ii, 2 maps, 3 text-figs.

Abstract in Geol. Centralbl., xix, 441-442.

—— 1913 A

Etwas über die Arten der Wildschafe und ihre Verbreitung.

Zool. Anz., xli, 439-445.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xix, pt. 3, 32.

—— 1913 B

Neues vom Schafochsen (*Ovibos moschatus* Blainv).

Naturw. Wochenschr., (N.F.), xii (xxvii), 757-759.

Abstract in Geol. Zentralbl., xxi, 332.

Kräusel, R. 1922 A

Die Nahrung on *Trachodon.*

Palaeont. Zeitschr. iv, 80.

Abstract in Geol. Centralbl., xxxi, 509.

Kraglievich, Lucas 1921 A

Estudios sobre los Mylodontinæ.

Descripción comparativa del género *Pleurolestodon* Rov.

Descripción del craneo y mandibula del *Pseudolestodon myloides gallenii* n. sbsp.

An. Mus. Nac. Buenos Aires, xxxi, 95-134, 3 pls.

In the reprints each of the titles has its own pagination.

Abstract in Rev. crit. Paléozool., xxxvii, 218.

Kraglievich, Lucas—Continued 1922 A

Eumylodon incertus n. sp.

An. Mus. Nac. Buenos Aires, xxxi, 451-456, pls. i-iii.

—— 1922 B

Estudios sobre los Mylodontinæ.

An. Mus. Nac. Buenos Aires, xxxi, 457-464, 1 table.

—— 1925 A

Un procionido cercoleptoide en el Pampeano Inferior de la Argentina, "*Brachynasua merani*" n. gen., n. sp.

Com. Mus. Nac. Buenos Aires, ii, Pal. Vert. Publ. No. 52, 181-191, 2 figs.

References to the literature in foot-notes.

—— 1925 B

Cuatro nuevos gravigrados de la fauna auracana "chapadmalense."

An. Mus. Nac. Buenos Aires, xxxiii, 215-235, pls. i-ix.

References to the literature in foot-notes.

—— 1925 C

Paramegatherium nazarrei, nuevo megateridio gigantesco descubierto en el territorio del Neuquen.

An. Mus. Nac. Buenos Aires, xxxiii, 237-254, 3 pls.

References to the literature in foot-notes.

—— 1925 D

Un nuevo eslabón en la serie filogenetica de la subfamilia *Nothrotherinæ: Senita mirabilis,* nuevo genero y especie de la formation entrerriana.

An. Mus. Nac. Buenos Aires, xxxiii, 177-193, 2 figs.

References to the literature in foot-notes.

—— 1926 A

Los arctoterios norteamericanos (*Tremarctotherium* n. gen.) en *relación* con los de Sud America.

An. Mus. Nac. Buenos Aires, xxxiv, 1-16, 3 figs.

Citation of the literature in foot-notes.

—— 1926 B

Notas sobre gravígrados de Sud América.

An. Mus. Nac. Buenos Aires, xxxiv, 21-36, 7 figs.

—— 1926 C

Sobre el conducto humeral en las vizcachas y paquirucos chapadmalenses con descripción del "*Pædotherium imperforatum.*"

An. Mus. Nac. Buenos Aires, xxxiv, 45-88, pls. i-viii.

Kraglievich, Lucas—Continued 1926 D
Presencia del genero *Nothrotherium* Lydek. (=*Cœlodon* Lund) en la fauna Pampeana. *Nothrotherium torresi* n. sp.
Rev. Mus. La Plata, xxix, 169-186, 8 figs.

Krall, Albert 1908 A
Die männliche Beckenflosse von *Hexanchus griseus* M. u. H.
Morphol. Jahrb., xxxvii, 529-585, pls. xii, xiii, 17 text-figs.
The bibliography consists of 18 titles.

Krause, Paul Gustaf 1901 A
Abstract of Brown, C., 1900 A, on *Hybodus.*
Geol. Centralbl., i, 119-121.

Krauss, F. 1862 B
Der Schädel des *Halitherium schinzi* Kaup.
Neues Jahrb. Min. Geol. Pal., 1862, 385-415, pls. vi, vii.

Kravetz, L. P. 1906 A
Entwicklungsgeschichte des Sternum und des Episternalapparats der Säugetiere.
Bull. Soc. Natural. Moscou, 1905, 1-59, pls. i, ii.
There is a bibliography of 9 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 97.

—— 1911 A
Entwickelung des Knorpelschädels von *Ceratodus.*
Bull. Soc. Natural. Moscou (n.s.), xxiv, 332-365, pls. i, ii.
The bibliography presents 11 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 62-65.

Kressmann, Margarethe 1912 A
Schuppenreste bei Sireniden.
Jena. Zeitschr. Naturwiss., xlviii (N.F. xli), 399-432, pl. xvii, 16 text-figs.
The bibliography comprises 37 titles.

Krivetski, A. 1917 A
Sur la morphologie des éléments de l'arc hyoïde chez les sélaciens.
Rev. Zool. Russe, ii, 16-19.

Kruizinga, P. 1924 A
Apateodus corneti (For.) in the Senonian beds of the southern part of Limburg (Netherlands).
Proc. Akad. Wet. Amsterdam, xxvii, 293-313, pls. i, ii.

Krukenberg, A. 1849 A
Beitrag zur Lehre von dem Röhrensystem der Zähne und Knochen.
Arch. Anat. Physiol. Med., 1849, 403-419, pl. vii.

Krull, Fritz 1906 A
Tyrannosaurus rex.
Prometheus, xvii, 350-351.

Krumbach, Thilo 1904 A
Die unteren Schneidezähne der Nagetiere, nach Gestalt und Funktion betrachtet.
Zool. Anz., xxvii, 273-290, 20 text-figs.

Kryzanovsky, S. 1916 A
The development of the skeleton of the paired fins of *Pristiurus melanostomus.*
Rev. Zool. Russe, i, 235-238, 8 figs.

Kühne, Konrad 1914 A
Über die Variationen der Wirbelsäule, des Brust-korbes und der Extremitätenplexus bei *Lacerta muralis* Dum. u. Bibr. und *Lacerta vivipara* Jacq.
Morphol. Jahrb., xlix, 407-507, 29 text-figs.

Kükenthal, W. 1891 A
See Hay, O. P., 1902 A, 129.
English translation in Ann. Mag. Nat. Hist. (6), ix, 279-285.

—— 1891 B
See Hay, O. P., 1902 A, 129.
English translation in Ann. Mag. Nat. Hist. (6), ix, 285-294, 8 figs.

—— 1891 C
Über die Anpassung von Säugethieren an das Leben in Wasser.
Zool. Jahrb. Syst., v, 373-399. English translation in Ann. Mag. Nat. Hist. (6), vii, 153-179.

—— 1894 B
Zur Entwicklungsgeschichte der Wale.
Verh. deutsch. Zool. Ges., 1893, iii, 69-75.

—— 1897 B
Ueber die Entwicklung der Sirenen.
Verh. deutsch. Zool. Ges., vii, 140-147.

—— 1897 C
Zur Entwicklungsgeschichte der Sirenen.
Verh. Ges. deutsch. Naturf., lxviii, 1896, Frankfurt, 181-186.

—— 1900 A
Die Wale der Arktis.
Fauna arctica (Römer und Schaudinn), i, 179-234, 11 figs.

—— 1905 A
[Remarks on paper by O. Abel.]
Verh. deutsch. Zool. Ges., xv, 96.

Kükenthal, W.—Continued 1907 A

Zähne.

Jahresber. Anat. Entwickl., (N.F.), XII, 385-396.

A review of the current literature.

—— 1908 A

Ueber die Ursache der Asymmetrie des Walschädels.

Anat. Anz., XXXIII, 609-618, 3 text-figs.

—— 1908 B

Ueber das Vorkomnen verkalkter und durchgebrochener oberer Eckzähne bei einem jungen Schaf.

Anat. Anz., XXXII, 498-499, 1 fig.

—— 1908 C

Die Wale und ihre wirtschaftliche Bedeutung.

Naturw. Wochenschr., XXIII (N.F., VII), 241-248.

—— 1909 A

Untersuchungen an Walen.

Jena. Zeitschr. Naturwiss., XLV, 545-588, pls. xlii-xlix, 6 text-figs.

—— 1909 B

Haare bei erwachsenen Delphinen.

Anat. Anz., XXXV, 8-10.

—— 1913 A

Säugetiere (Mammalia).

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena), VIII, 633-695, figs. 1-42.

There is a bibliography of 27 important works.

—— 1914 A

Zur Entwicklung des Gebisses des Dugong, ein Beitrag zur Lösung der Frage nach dem Ursprunge der Säugetierzähne.

Anat. Anz., XLV, 561-577, 11 text-figs.

—— 1914 B

Untersuchungen an Walen. (Zweiter Teil.)

Jena. Zeitschr. Naturwiss., LI, 1-122, pls. i-iiic, 24 text-figs.

On pages 70-71, 92, and 119-122 is found a bibliography of the subject discussed.

—— 1922 A

Die Brustflosse des Grönlandswales (*Balæna mysticetus* L.).

Bijdr. Dierk. Amsterdam, Feest-Num., XXII, 59-63, 1 pl.

The bibliography presents 11 titles.

Kümmel, H. B. 1911 A

The Cretaceous and Tertiary formations of New Jersey.

Bull. Geol. Surv. New Jersey, IV, 7-21.

Explanatory of the geological formations which contain fossil fishes, as described by H. W. Fowler.

Kukuk, Paul 1913 A

Über den Fund eines Moschusochsenschädels im Diluvium des Emschertales.

Zeitschr. deutsch. Geol. Ges., LXV, 596-600, pls. xix, xx.

This skull is referred to *Ovibos mackenzianus* Kow.

Kulczycki, Wladimir 1901 A

Zur Entwickelungsgeschichte des Schultergürtels bei den Vögeln, mit besonderer Berücksichtigung des Schlüsselbeines (*Gallus, Columba, Anas*).

Anat. Anz., XIX, 577-590, 3 text-figs.

—— 1908 A

Zur Entwickelungsgeschichte des Schlüsselbeines und der Halshautmuskulatur bei den Vögeln und in besonderen beim Kanarienvogel.

Anat. Anz., XXXII, 125-129.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 121.

Kunkel, B. W. 1911 A

Zur Entwickelungsgeschichte und vergleichenden Morphologie des Schildkrötenschädels.

Anat. Anz., XXXIX, 354-364, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 65-68.

—— 1912 A

The development of the skull of *Emys lutaria*.

Jour. Morphol., XXXII, 693-780, pls. i-vi, 23 text-figs.

The bibliography presents 38 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 81-85.

Kunstler, J., and J. Chaine 1906 A

Variations de formule dentaires chez les Primates.

C. R. Soc. Biol., LX, 99-101.

Kunz, George F. 1916 A

Ivory and the elephant in art, in archæology, and in science.

8vo., i-xxvi+1-527 pages, with numerous illustrations.

Kunze, Arnold 1912 A

Über die Brustflosse der Wale.

Zool. Jahrb. Anat., XXXII, 577-651, pls. xxxiii-xxxv, 27 text-figs.

Kupffer, C. 1893 A

Entwickelungsgeschichte des Kopfes.

Anat. Hefte, Ergebn., II, 501-564, 6 figs.

A review of the literature of the subject. The bibliography includes 81 titles.

—— 1896 A

Entwicklungsgeschichte des Kopfes.

Anat. Hefte, Ergebn., V, 562-618, pl. 1.

A review of the literature. 161 works are cited.

Kurz, ——. 1925 A

Untersuchungen zur Anatomie des Kopfes des Jangtsestöres.

Zeitschr. Anat. Entwicklungsges., Abt. I, LXXV, 36-68, 9 figs.

The bibliography occupies 3 pages.

Kusnezow, S. K. 1896 A

Fund eines Mammuthskeletes und menschlichen Spuren in der Nähe der Stadt Tomsk (Westsibiren).

Mitt. Anthrop. Ges. Wien., XXVI, 186-191. See also Gaea, XXXIII, 1897, 221-230.

Presents a number of cases where artifacts have been found, besides references to the literature of the subject.

Kyle, H. M. 1921 A

The assymetry, metamorphosis and origin of flat-fishes.

Phil. Trans. Roy. Soc. Lond., CCXI, 75-129, pls. iv-x.

Laaser, Paul 1900 A

Die Entwickelung der Zahnleiste bei den Selachiern.

Anat. Anz., XVII, 479-489, 8 text-figs.

—— 1903 A

Die Zahnleiste und die ersten Zahnanlagen der Selachier.

Jena. Zeitschr. Naturwiss., XXXVII, 551-578, pl. XXVIII, 13 text-figs.

La Baume, Wolfgang, 1909 A

Beitrag zur Kenntnis der fossilen und subfossilen Boviden, mit besonderer Berücksichtigung der in westpreussischen Provinzial Museum zu Dantzig befindlichen Reste.

Schrift. naturf. Ges. Danzig (N.F.), XII, Heft 3, 45-80, 10 tables, 7 plates.

Abstracts in Geol. Centralbl., XIX, 399-400; Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 433.

Lacépède, E., and G. **Cuvier** 1808 A

Des os fossiles trouvés dans l'Amérique-septentrionale.

Jour. Phys. Chim. Hist. nat., LXVII, 330-332.

Refers to elephant and mastodon bones sent to Paris by President Jefferson.

Lacoe, Ralph Dupuy 1882 A

Fossil reptile tracks from the anthracite Coal measures.

Proc. Wyoming Penn. Geol. Soc., I, No. 3, 6-8.

Lafitte, Jean-Paul 1905 A

Les dinosauriens, reptiles fossiles.

La Nature, XXXIII, 1, 407-410, 4 text-figs.

For brief abstract see Geol. Centralbl., VII, 121-122.

—— 1909 A

Que faut-il penser de l'opinion de M. Tornier?

La Nature, XXXVII, 2, 222-223.

Lahille, F. 1913 A

Nota sobre los géneros *Heptranchias* y *Hexanchus*.

An. Mus. Nac. Buenos Aires, XXIV, 25-34, pls. VIII, IX, 3 text-figs.

Laizer and **Parieu** 1839 A

Note sur la mâchoire d'un carnassier fossile, nommé *Hyenodon leptorhynchus*.

Ann. Sci. nat. (2), XI, 27-32, pl. II.

Lakjer, Tage 1927 A

Studien über die Gaumenregion bei Sauriern im vergleich mit Anamniern und primitiven Sauropsiden.

Zool. Jahrb. Anat., XLIX, 57-356, 138 figs., 2 tables.

Pages 343-354 are occupied by the bibliography.

Laloy, L. 1907 A

Evolution du systeme dentaire chez les mammifères.

Rev. Scient. Paris (5), XIII, 583-590.

Lambe, Lawrence M. 1899 B

Report on the reptilian remains from the Belly River and Laramie formations of the Red Deer River district, Alberta, collected in 1897-1898.

Summ. Rep. Geol. Surv. Canada, for 1898, 183A-190A.

—— 1901 A

Notes on a turtle from the Cretaceous rocks of Alberta.

Ottawa Naturalist; XV, 63-67, pls. I-IV.

Describes *Adocus variolosus* (Cope).

Abstracts in Geol. Centralbl., III, 120; Rev. crit. Paléozool., VI, 14.

—— 1901 B

A brief report of field work.

Summ. Rep. Geol. Surv. Canada, for 1900, 182-183.

Investigation of Cretaceous vertebrates.

Lambe, Lawrence M.—Cont'd 1902 A

On Vertebrata of the Mid-Cretaceous of the Northwest Territory.

2. New genera and species from the Belly River series (Mid-Cretaceous).

Contrib. Canad. Pal., III (4to.), 25-81, pls. i-xxi, 24 text-figs.

Abstracts in Science (n.s.), XVI, 673; Ottawa Naturalist, XVI, 169; Canad. Rec. Sci., IX, 86-88; Geol. Centralbl., III, 504; Rev. crit. Paléozool., VII, 21; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 101-103.

—— 1902 B

On *Trionyx foveatus* Leidy and *Trionyx vagans* Cope from the Cretaceous rocks of Alberta.

Summ. Rep. Geol. Surv. Canada for 1901 A, 81-86, pls. i-iv.

Brief abstracts in Geol. Centralbl., IX, 582; Rev. crit. Paléozool., VI, 176.

—— 1902 C

Red Deer River, Alberta.

Summ. Rep. Geol. Surv. Canada for 1901, 80-81.

A brief report on the author's work during 1901.

—— 1903 A

Stegoceras and *Stereocephalus*.

Science (n.s.), XVIII, 60.

—— 1903 B

The lower jaw of *Dryptosaurus incrassatus* (Cope).

Ottawa Naturalist, XVII, 133-139, pls. i-iii.

Abstracts in Geol. Centralbl., V, 173; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 131; Rev. crit. Paléozool., VIII, 82.

—— 1903 C

Palæontological work.

Summ. Rep. Geol. Surv. Canada for 1902, XV, 467A-469A.

A report on work done during the year 1902.

—— 1904 A

The grasping power of the manus of *Ornithomimus altus* Lambe.

Science (n.s.), XIX, 254.

Abstract in Geol. Centralbl., V, 655.

—— 1904 B

On the squamoso-parietal crest of the horned dinosaurs *Centrosaurus apertus* and *Monoclonius canadensis* from the Cretaceous of Alberta.

Trans. Roy. Soc. Canada (2), X, 3-12, pls. i, ii, 1 text-fig.

Reprints were issued in 1904. The volume cited appeared in 1905.

Abstracts in Geol. Centralbl., VI, 717; Rev. crit. Paléozool., IX, 121.

Lambe, Lawrence M.—Cont'd 1907 B

Progress of vertebrate palæontology in Canada.

Trans. Roy. Soc. Canada (2), X, sec. iv, 13-56.

Reprints were probably issued in 1904; the volume cited appeared in 1905.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 154, and Geol. Centralbl., IX, 580.

—— 1904 D

On the squamoso-parietal crest of two species of horned dinosaurs from the Cretaceous of Alberta.

Ottawa Naturalist, XVIII, 81-84, pls. i, ii.

Abstracts in Geol. Centralbl., VI, 717; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 171; Rev. crit. Paléozool., VIII, 210.

—— 1904 E

The grasping power of the manus of *Ornithomimus altus* Lambe.

Ottawa Naturalist, XVIII, 33-36, pls. i, ii.

Abstract in Geol. Centralbl., VI, 716; Rev. crit. Paléozool., IX, 3.

—— 1904 F

Vertebrate palæontology.

Summ. Rep. Geol. Surv. Canada for 1903, XV, 205AA-207AA.

Brief notice in Geol. Centralbl., IX, 580.

A report on the work accomplished during the year 1903.

—— 1904 G

On *Dryptosaurus incrassatus* (Cope), from the Edmonton series of the Northwest Territory.

Contrib. Canad. Pal., III (4to), 1-27, pls. i-viii, 2 text-figs.

Abstract in Rev. crit. Paléozool., IX, 7.

—— 1905 A

On the tooth-structure of *Mesohippus westoni* (Cope).

Amer. Geologist, XXXV, 243-245, pl. xiv.

Abstracts in Geol. Centralbl., X, 41; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 533; Rev. crit. Paléozool., X, 13.

—— 1905 B

A new species of *Hyracodon* (*H. priscidens*) from the Oligocene of the Cypress Hills, Assiniboia.

Trans. Roy. Soc. Canada (2), XI, sec. 4, 37-42, with pl. i.

Abstracts in Geol. Centralbl., X, 41; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 533; Rev. crit. Paléozool., X, 12; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 178.

Lambe, Lawrence M.—Cont'd 1905 C

Fossil horses of the Oligocene of the Cypress Hills, Assiniboia.

Trans. Roy. Soc. Canada (2), XI, 43-52, pl. ii.

Abstracts in Geol. Centralbl., X, 40; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 534; Rev. crit. Paléozool., X, 12.

——— 1905 D

Vertebrate palæontology.

Summ. Rep. Geol. Surv. Canada for 1904, XVI, 362A-371A.

A report on the author's activities during the year 1904.

Abstract in Geol. Centralbl., X, 39-40.

——— 1906 A

Description of new species of *Testudo* and *Baëna* with remarks on some Cretaceous forms.

Ottawa Naturalist, XIX, 187-196, pls. iii, iv.

Abstracts in Geol. Centralbl., IX, 400; X, 45; Geol. Mag. (5), III, 270; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 465; Rev. crit. Paléozool., X, 148; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 163.

——— 1906 B

Boremys, a new chelonian genus from the Cretaceous of Alberta.

Ottawa Naturalist, XIX, 232-234.

Abstracts in Geol. Centralbl., IX, 400; X, 43-44; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 465; Rev. crit. Paléozool., X, 149.

——— 1906 C

On *Amyzon brevipinne* Cope, from the Amyzon beds of the southern interior of British Columbia.

Trans. Roy. Soc. Canada (2), XII, 151-156, pl. i.

Abstracts in Geol. Centralbl., IX, 409; X, 45-46; Rev. crit Paléozool., XI, 94; Sci. Progress, II, 523.

——— 1906 D

Report on vertebrate palæontology.

Summ. Rep. Geol. Surv. Canada for 1906, 174-176.

——— 1906 E

Report of vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1905, 135-138.

——— 1907 A

On a tooth of *Ovibos* from the Pleistocene gravels near Midway, B. C.

Ottawa Naturalist, XXI, 15-18, pl. i.

Tooth referred provisionally to *Ovibos moschatus*.

Abstracts in Geol. Centralbl., X, 41; Rev. crit. Paléozool., XI, 220.

Lambe, Lawrence M.—Cont'd 1907 B

[Letter to R. S. Lull dated May 30, 1915, on fossils collected on the Red Deer River, Alberta.]

Mon. U. S. Geol. Surv., XLIX, 178-179.

——— 1907 C

On a new crocodilian genus and species from Judith River formation of Alberta.

Trans. Roy. Soc. Canada (3), I, 219-244, pls. i-v.

Describes *Leidyosuchus canadensis*.

Abstracts in Geol. Centralbl., X, 43; Nature, LXXVIII, 278; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 450; Sci. Progress, III, 462.

——— 1908 A

The Vertebrata of the Oligocene of the Cypress Hills, Saskatchewan.

Contrib. Canad. Pal., III (4to.), pt. IV, 1-65, pls. i-viii, 13 text-figs.

Abstracts in Amer. Jour. Sci. (4), XXVIII, 501; Rev. crit. Paléozool., 13, 143, 206.

Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 349-350.

——— 1908 B

Report on vertebrate palæontology.

Summ. Rep. Geol. Surv. Canada for 1907, 110-112.

——— 1909 A

The fish fauna of the Albert shales of New Brunswick.

Amer. Jour. Sci. (4), XXVIII, 165-174, 8 figs.

Abstracts in Geol. Centralbl., XV, 312-313; Rev. crit. Paléozool., XIV, 18; Sci. Progress, IV, 674.

——— 1909 B

Report on vertebrate palæontology.

Summ. Rep. Geol. Surv. Canada for 1908, 176-178.

——— 1910 A

Note on the parietal crest of *Centrosaurus apertus* and a proposed new generic name for *Stereocephalus tutus*.

Ottawa Naturalist, XXIV, 149-151, pl. iii.

Abstract in Geol. Centralbl., XVI, 217; Rev. crit. Paléozool., XV, 146; Amer. Jour. Sci. (4), XXXI, 339.

——— 1910 B

Palæoniscid fishes from the Albert shales of New Brunswick.

Contrib. Canad. Pal., III (4to), pt. V, Mem. No. 3, 7-35, pls. i-xi.

There is a bibliography of 24 titles.

Abstracts in Sci. Progress, V, 602; Rev. crit. Paléozool., XV, 33.

——— 1910 C

Report on palæontology and zoology.

Summ. Rep. Geol. Surv. Canada for 1909, 269-273.

Lambe, Lawrence M.—Cont'd 1911 A

On *Arctotherium* from the Pleistocene of Yukon.

Ottawa Naturalist, xxv, 21-26, pls. i-iii.

Describes *A. yukonense* sp. nov.

Abstracts in Geol. Centralbl., xvii, 617; Sci. Progress, vi, 559; Geol. Mag. (5), ix, 428.

Review in Rev. crit. Paléozool., xvi, 85.

—— 1911 B

Report of palæontological division.

Summ. Rep. Geol. Surv. Canada for 1910, 269-271.

—— 1912 A

The past vertebrate life of Canada.

Trans. Roy. Soc. Canada (3), v, 3-15.

Review in Rev. crit. Paléozool., xvi, 234.

—— 1912 B

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1911, 346-349.

—— 1913 A

The manus in a specimen of *Trachodon* from the Edmonton formation of Alberta.

Ottawa Naturalist, xxvii, 21-25, pls. i-iii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, ii, Ref., 512; Rev. crit. Paléozool., xviii, 1; xx, 49.

—— 1913 B

Description of a new species of *Testudo*, and of a remarkable specimen of *Stylemys nebrascensis*, from the Oligocene of Wyoming, U. S. A.

Ottawa Naturalist, xxvii, 57-63, pls. iv-vii, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, i, Ref., 337; Sci. Progress, viii, 644; Rev. crit. Paléozool., xviii, 55; xx, 50-54; Geol. Zentralbl., xxix, 352.

—— 1913 C

A new genus and species of Ceratopsia from the Belly River formation of Alberta.

Ottawa Naturalist, xxvii, 109-116, pls. x-xii.

Abstracts in Sci. Progress, viii, 641; Rev. crit. Paléozool., xviii, 54; xx, 50; Geol. Zentralbl., xxi, 38; Nature, xciii, 332.

—— 1913 D

The occurrence of helodont teeth at Roche Miette and vicinity, Alberta.

Bull. Victoria Mem. Mus. Canada, i, 17-20, pl. ii.

Abstract in Geol. Zentralbl., xxi, 143.

Lambe, Lawrence M.—Cont'd 1914 A

On new species of *Aspideretes* from the Belly River formation of Alberta, with further information regarding the structure of the carapace of *Boremys pulchra*.

Trans. Roy. Soc. Canada (3), viii, sec. 4, 11-16, 1 plate, 1 text-fig.

—— 1914 B

On the fore-limb of a carnivorous dinosaur from the Belly River formation of Alberta, and a new genus of Ceratopsia from the same horizon, with remarks on the integument of some Cretaceous herbivorous dinosaurs.

Ottawa Naturalist, xxvii, 129-135, pls. xiii-xvii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, i, Ref., 502; Rev. crit. Paléozool., xviii, 154.

—— 1914 C

On *Gryposaurus notabilis*, a new genus and species of trachodont dinosaur from the Belly River formation of Alberta, with a description of the skull of *Chasmosaurus belli*.

Ottawa Naturalist, xxvii, 145-155, pls. xviii-xx.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, ii, Ref., 467-468; Rev. crit, Paléozool., xviii, 154.

—— 1914 D

On a new genus and species of carnivorous dinosaur from the Belly River formation of Alberta, with a description of the skull of *Stephanosaurus marginatus* from the same horizon.

Ottawa Naturalist, xxviii, 13-20, pl. i.

Abstract in Rev. crit. Paléozool., xviii, 154; xx, 49.

—— 1914 E

Description of a new species of *Platysomus* from the neighborhood of Banff, Alberta.

Trans. Roy. Soc. Canada (3), viii, 17-23, pl. i, 1 text-fig.

—— 1914 F

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1913, 293-299.

—— 1914 G

Contributions to Canadian palæontology.

Canad. Rec. Sci., ix, 383-386.

Lambe, Lawrence M.—Cont'd 1914 H

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1912, 397-403, pls. i, ii.

—— 1915 A

On *Eoceratops canadensis*, gen. nov., with remarks on other genera of Cretaceous horned dinosaurs.

Can. Geol. Surv. Mus. Bull., XII, 1-49, pls. i-xi.

Abstracts in Rev. crit. Paléozool., XX, 2; Geol. Zentralbl., XXVIII, 155.

—— 1915 B

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1914, 116-130.

—— 1916 A

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada for 1915, 193-198.

—— 1916 B

Ganoid fishes from near Banff, Alberta.

Trans. Roy. Soc. Canada (3), X, sec. iv, 35-44, pls. i-iii.

—— 1916 C

Report on bison and mastodon remains.

Rep. Prov. Mus. Nat. Hist. Victoria for 1915 (1916), 21.

—— 1917 A

On *Cheneosaurus tolmanensis*, a new genus and species of trachodont dinosaur from the Edmonton Cretaceous of Alberta.

Ottawa Naturalist, XXX, 117-123, pls. vi, vii.

Abstract in Rev. crit. Paléozool., XXII, 59.

—— 1917 B

The Cretaceous carnivorous dinosaur *Gorgosaurus*.

Can. Geol. Surv., Mem. 100 (Geol. ser. No. 83), i-iii; 1-84, 49 illustrations.

Abstracts in Geol. Mag. (6), V, 519; Rev. crit. Paléozool., XXIV, 146; Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 256-257; Geol. Zentralbl., XXVIII, 185.

—— 1917 C

A new genus and species of crestless hadrosaur from the Edmonton formation of Alberta.

Ottawa Naturalist, XXXI, 65-73, pls. ii, iii.

—— 1917 D

Report on tooth of *Desmostylus*.

Rep. Prov. Mus. Nat. Hist. Victoria, for 1916 (1917), 42, pl. ix.

Lambe, Lawrence M.—Cont'd 1917 E

Report of the vertebrate palæontologist.

Summ. Rep. Geol. Surv. Canada, 1916 (1917), 288-295.

—— 1918 A

The Cretaceous genus *Stegoceras* typifying a new family referred provisionally to the Stegosauria.

Trans. Roy. Soc. Canada (3), XII, 23-36, pls. i, ii, 1 text-fig.

—— 1918 B

On the remains of a selachian from the Edmonton Cretaceous of Alberta.

Ottawa Naturalist, XXXII, 27-28, figs.

—— 1918 C

On the genus *Trachodon* of Leidy.

Ottawa Naturalist, XXXII, 135-139.

—— 1920 A

The hadrosaur *Edmontosaurus* from the Upper Cretaceous of Alberta.

Can. Geol. Surv., Mem. 120 (Geol. Ser. 102), i-ii; 1-79, 39 text-figs.

Noticed in Sci. Progress, XVI, 215; Amer. Jour. Sci. (5), I, 374.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 90; Geol. Zentralbl., XXVIII, 186.

Review in Rev. crit. Paléozool., XXVII, 9.

—— 1920 B

Description of a new genus and species (*Panoplosaurus mirus*) of an armoured dinosaur from the Belly River beds of Alberta.

Trans. Roy. Soc. Canada (3), XIII, sec. iv, 39-50, pls. i-xii.

Lambrecht, Koloman 1914 A

Morphologie des Mittelhandknochens—Os metacarpi—der Vögel.

Aquila, XXI, 53-84, pl. viii (25 figs.), 5 text-figs.

In the bibliography are 72 titles.

—— 1916 A

A madarak palæontologiájának története és irodalma.

Aquila, XXIII, 196-215.

This paper presents the Hungarian version of the German version below recorded as Lambrecht, K., 1916 C.

—— 1916 B

Bibliographia palæo-ornithologica usque ad annum 1916.

Aquila, XXIII, 215-307.

—— 1916 C

Geschichte und Bibliographie der Palæo-ornithologie.

Aquila, XXIII, 483-501.

Abstract in Geol. Zentralbl., XXIII, 444.

Lambrecht, Koloman—Cont'd 1921 A
Fossilium catalogus. I: Animalia. Pars 12: *Aves.*
8vo. Berlin. Editus a C. Diener, i-iv+1-104 pages.

Landois, H. 1863 A
Über ein anatomisches Unterscheidungsmerkmal zwischen Haushund und Wolf.
Morphol. Jahrb., IX, 163-165.

Landsberger, Richard 1914 A
Das zentrifugale Wachstum der Zähne.
Arch. Anat. Entwickl., 1914, 206-212, 7 text-figs.

Lane, Alfred C. 1902 A
Mammoth and mastodon.
Geol. Surv. Michigan for 1901, 252-253.

—— 1903 A
Distribution of mastodon remains in Michigan.
Science (n.s.), XVII, 297.

—— 1906 A
Mammoth and mastodon.
Geol. Surv. Michigan for 1905, 553.

Lane, H. H. 1909 A
A suggested classification of the edentates.
Res. Bull. Univ. Okla., II, 19-27.

—— 1910 A
A corrected classification of the edentates.
Science (n.s.), XXXI, 913-914.

—— 1910 B
A paired entoplastron in *Trionyx* and its significance.
Proc. Ind. Acad. Sci., 1909 (1910), 345-350, 2 figs.

—— 1927 A
A new rhinoceros from Kansas.
Kansas Univ. Sci. Bull., XVII, 297-311, pls. xxvii-xxv.

Lang, Herbert 1925 A
Frozen Siberian mammoths (*Elephas primigenius*).
Bull. N. Y. Zool. Soc., XXVIII, 1-10, 43-49, 10 figs.

Langley, S. P. 1902 A
The greatest flying creature.
Rep. Smithson. Instn. for 1901, 649-654, pls. i-v, 1 text-fig.
Abstracts in Geol. Centralbl., IX, 582; Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 516.
Reprinted in Scient. Amer., Suppl., LV, 22644-22645.

Lankester, E. Ray 1864 C
The Old Red Sandstone fishes of England.
Pop. Sci. Review, III, 441-447, pl. xvi.

—— 1864 D
On the genus *Pteraspis.*
Geol. Mag., I, 292.

—— 1865 B
On the British species of the genus *Cephalaspis* and on the Scotch *Pteraspis.*
Geol. Mag., II, 517-518.

—— 1868 A
A monograph of the fishes of the Old Red sandstone of Britain. Pt. I: The Cephalaspidæ.
Palæont. Soc. Mon., XXI, 1-33, pls. i-v, text-figs. 1-10. Recorded in Hay, O. P., 1902 A, as Powrie and Lankester, 1868 A.

—— 1870 B
A new ziphoid cetacean from the Suffolk bone-bed (*Choneziphius packardi*).
Quart. Jour. Geol. Soc., XXVI, 502-509, pl. ii, 2 text-figs.

—— 1870 C
A monograph of the fishes of the Old Red sandstone. Pt. I (concluded): The Cephalaspidæ.
Palæont. Soc. Mon., XXI, 33-62, pls. vi-xiv, text-figs. 11-33. (Recorded in Hay, O. P., 1902 A, as Powrie and Lankester, 1870 A.)

—— 1870 D
On a new *Cephalaspis* discovered in America.
Canad. Naturalist (2), v, 222-223.
Same as Lankester, E. R., 1870 A.

—— 1880 A
On the tusks of the fossil walrus found in the Red Crag of Suffolk.
Jour. Linnean Soc. Zool., XV, 144-146.

—— 1897 A
The taxonomic position of the Pteraspidæ, Cephalaspidæ, and Asterolepidæ.
Nat. Sci., XI, 45-47.

—— 1905 A
Extinct animals.
London, 8vo., i-xxii+1-331 pages, 280 illustrations.
Reviewed in Knowl. Scient. News (n.s.), II, 274; Rev. crit. Paléozool., X, 81-82.

Lankester, E. Ray—Cont'd 1907 A

The origin of the lateral horns of the giraffe in fœtal life on the area of the parietal bones.

Proc. Zool. Soc. Lond., 1907, I, 100-115, text-figs. 24-36.

—— 1908 A

On certain points in the structure of the cervical vertebræ of the okapi and the giraffe.

Proc. Zool. Soc. Lond., 1908, 320-334, text-figs. 60-71.

—— 1924 A

The gorilla's foot.

Nature, CXIII, 10, 11, 83, 84.

Lansing, Gerrit Y. 1854 A

Catalogue of fossils belonging to the New Red-sandstone period of the Connecticut River valley, collected by the late Dexter Marsh of Greenfield, Massachusetts.

Rep. State Cab. N. Y., VII, 60-65.

—— 1861 A

Report of the Chancellor.

Rep. State Cab. N. Y., XIV, 1-15.

Lapham, I. A. 1860 A

Communication on fossil fishes found at Milwaukee, Wis.

Trans. Acad. Sci. St. Louis, I, 684.

No names were given.

—— 1895 A

Letter to J. D. Dana on Albert Koch's *Hydrarchos*.

Proc. U. S. Nat. Mus., XLIV, 653, in Gidley, J. W., 1913 A. The writer's name spelled I. A. Latham.

The letter is mentioned in Dana, J. D., 1875 A, 341.

Lapicque, L., and P. **Girard** 1907 A

Sur le poids de l'encéphale chez les animaux domestiques.

C. R. Soc. Biol., LXII, 1015-1018.

Larger, René 1913 A

La contre-évolution ou dégénérescence par l'hérédité pathologique cause naturelle de l'extinction des groupes animaux actuels et fossiles. Essai de paléopathologie générale comparée.

Bull. Mém. Soc. Anthrop. (6), IV, 683-729.

Abstract in Rev. crit. Paléozool., XXI. 115

Larkin, Pierce 1910 A

The occurrence of a sauropod dinosaur in the Trinity Cretaceous of Oklahoma.

Jour. Geol., XVIII, 93-97, 4 figs. No name, generic or specific, is given.

Abstracts in Geol. Centralbl., XV, 219; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 321.

Lartet, E. 1851 A

Note sur la colline de Sansan.

8vo. Auch, 1851. Pp. 1-47, 1 fig.

—— 1859 A

Sur la dentition des proboscidiens fossiles (Dinotherium, mastodontes et éléphants) et sur la distribution géographique et stratigraphique de leurs débris en Europe.

Bull. Soc. géol. France (2), XVI, 469-515, pls. xiii-xv.

—— 1865 A

Note on *Ovibos moschatus* Blainville.

Quart. Jour. Geol. Soc., XXI, 474-476.

Lataste, Fernand 1887 A

Étude de la dent canine, appliquée au cas présenté par le genre Damanet complétée par les définitions des catégories de dents communes à plusieurs ordres de la classe des mammifères.

Zool. Anz., X, 265-271.

—— 1888 A

Sur la classification des batraciens anoures, à propos du system de M. le Dr. R. Blanchard.

Zool. Anz., XI, 236-240, 540.

For reply see Zool. Anz., XI, 358.

Latreille, Pierre A. 1825 A

Familles naturelles du règne animal, exposées succinctement et dans un ordre analytique, avec l'indication de leurs genres.

Paris, 8vo., 1-570 pages.

Lavocat, A. 1883 A

Construction de la ceinture scapulo-claviculaire dans la série des vertébrés.

C. R. Acad. Sci. Paris, XCVII, 1316-1319.

—— 1884 A

Du rachis dans la série des animaux vertébrés.

C. R. Acad. Sci. Paris, XCIX, 1125-1127.

—— 1885 A

Rachis des vertébrés.

Mém. Acad. Sci. Toulouse (8), VII, 23-54.

—— 1888 A

Appareil operculaire des poissons.

Mém. Acad. Sci. Toulouse (8), X, 62-76, pl.

Lavocat, A.—Continued 1889 A
Côtes et sternum des vertébrés.
Mém. Acad. Sci. Toulouse (9), I, 39-55.

—— 1896 A
Marsupiaux actuels et fossiles.
Mém. Acad. Sci. Toulouse (9), VIII, 21-29.

—— 1896 B
Nageoires des poissons.
Mém. Acad. Sci. Toulouse (9), VIII, 193-198.

—— 1897 A
Les poissons actuels et fossiles.
Mém. Acad. Sci. Toulouse (9). IX, 138-154.

Lawley, Roberto 1875 B
Monografia dei resti fossili del genere *Notidanus rinvenuti* nel Pliocene subappenino Toscano.
Atti Soc. Toscano Sci. Nat., III, 57-76, pls. i-iv.
Same as Lawley, R., 1875 A, with different pagination.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1877, 216-218; ibid. 1879, 723; Verh. Geol. Reichsanst. Wien, 1876, 154-155.

—— 1878 A
Confronto di una mascella di *Carcharodon lamia* Rond., coi denti di *Carcharodon* fossili trovati nelli collini Toscane.
Atti Soc. Toscana Sci. Nat., III, 330-336.

—— 1878 B
Resti di un *Oxyrhina rivenuta* alle case bianche pressa alle saline di Volterra.
Atti Soc. Toscana Sci. Nat., III, 337-340.

—— 1878 C
Confronto di denti fossili che si trovano nelle colline Toscane con la dentizione dell' *Oxyrhina spallanzanii* Bonp. vivente in Mediterraneo.
Atti Sci. Toscana Sci. Nat., III, 343-349.

—— 1881 A
Studi comparativi sui pesci fossili coi viventi dei generi *Carcharodon, Oxyrhina* e *Galeocerdo.*
8vo. Pisa, 151 pages, 25 pls. (not seen).

Lawson, Andrew C. 1889 A
Report on the geology of the Rainy Lake region.
Can. Geol. Nat. Hist. Surv., III, pt. 1, 1 F-182 F.

—— 1914 A
Description of the San Francisco [Calif.] district.
Folio U. S. Geol. Surv., CXCIII, 1-24, 15 maps, 1 sheet of illustrations, 3 text-figs.

Lawson, Andrew C., and Charles **Palache** 1902 A
The Berkeley hills; a detail of Coast Range geology.
Bull. Dept. Geol. Univ. Calif., II, 349-450, pls. x-xvii.

Lawson, J. S. 1874 A
Donation of vertebrate fossils from Whidbey Island, Puget Sound.
Proc. Calif. Acad. Sci., 1874, 379-380.

Lay, James H. 1876 A
History of Benton County, Missouri. Prepared for the Centennial celebration of July 4, 1876, at Warsaw, Missouri.
8vo. Pp. 1-76.
Mentions (p. 14) the finding of mastodon remains on the Osage and Pomme de Terre Rivers.

Lazarus, Siegfried Paul 1896 A
Zur Morphologie des Fuss-Skelets.
Morphol. Jahrb., XXIV, 1-166, 31 figs.
There is a bibliography of 43 titles.

Lazier and **Parieu** 1838 A
Notice sur un nouveau genre de pachyderme fossile nommé *Oplotherium.*
Ann. Sci. nat. (2), X, 335-341, pl. ix.

Lebedinsky, N. G. 1913 A
Beiträge zur Morphologie und Entwicklungsgeschichte des Vogelbeckens.
Jena. Zeitschr. Naturwiss., I, 647-774, pls. xxv-xxviii, 138 text-figs, 12 tables.
On pages 772-774 is a list of works bearing on the subject.

—— 1913 B
Beiträge zur Morphologie und Entwicklungsgeschichte des Vogelbeckens.
Vierteljahrsschr. naturf. Ges. Zurich, LVIII, 191-197.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 151-152.

—— 1914 A
Über den Processus pectinealis des Straussbeckens und seine phylogenetische Bedeutung.
Anat. Anz., XLVI, 84-89, 2 text-figs.

—— 1917 A
Ontogenetische Gestaltsveränderungen des Meckel'schen Knorpels der Sauropsiden.
Anat. Anz., L, 313-339, 27 figs.
The bibliography comprises 25 titles.

—— 1918 A
Über den Einfluss der Ernährungsweise auf die allgemeine Form des Unterkiefers der Vögel.
Zool. Anz., L, 36-41.

Lebedinsky, N. G.—Cont'd 1918 B

Untersuchungen zur Morphologie und Entwicklungsgeschichte des Unterkiefers der Vögel.

Rev. suisse Zool., XXVI, 129-146, 6 figs.

—— 1921 A

Zur Syndesmologie der Vögel.

Anat. Anz., LIV, 8-15, 4 figs.

The bibliography presents 12 titles.

Leboucq, H. 1884 A

Recherches sur la morphologie du carpe chez les mammifères.

Arch. Biol., V, 35-102, pls. iii-v.

—— 1889 A

Recherches sur la morphologie de la main chez mammifères marins.

Arch. Biol., IX, 571-648, pls. xxxvi-xli.

Citations of the literature in foot-notes.

—— 1904 A

Ueber die Endlappen der Pinnipedierfinger.

Anat. Anz. Ergänzungsh., XXV, 120-124.

—— 1904 B

Organogénie des pinnipèdes. I: Les extrémités.

Result. Voy. S. Y. Belg. Zool., 1-20, pls. i, ii, 6 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 117-118.

—— 1904 C

Recherches sur le développement des phalanges terminales des doigts chez l'homme et chez les mammifères.

Ann. Soc. Méd. Gand, LXXXIV, 227-242, pl. xvii.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 119.

Leche, W. 1887 A

Mammalia.

Bronn's Klass. Ordn., VI, Abth. 5, 571-656, pls. xciii-cxii, 15 text-figs.

Pages 571-592 were issued in 1884; pages 593-624, in 1885; pages 625-656, in 1887. The remaining pages, 657-1169, are recorded under Leche, 1900 A. See Giebel, C. G., 1883 A.

—— 1893 C

Ueber die Zahnentwickelung von *Iguana tuberculata*.

Anat. Anz., VIII, 793-800, 7 figs.

—— 1900 A

Mammalia.

Bronn's Klass. Ordn., VI, 657-1169, pls. cxiii-cxxi.

Pp. 657-720, 1888; 721-768, 1890; 769-816, 1892; 817-864, 1893; 865-912, 1895; 913-1024, 1897; 1025-1072, 1898; 1073-1120, 1899; 1121-1169, 1900. On pages 982-985 are cited 78 papers on the development of the dental system.

Leche, W.—Continued 1902 A

Zur Entwicklungsgeschichte des Zahnsystems der Säugethiere, zugleich ein Beitrag zur Stammesgeschichte dieser Thiergruppe. II Theil: Phylogenie. I Heft: Die Familie der Erinaceidæ.

Bibl. Zool., Heft 37, 1-104, pls. i-iv, 69 text-figs.

There is a bibliography of 92 titles.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 144-147.

—— 1903 A

Zur Entwickelungsgeschichte des Zahnsystems der Säugetiere, zugleich ein Beitrag zur Stammesgeschichte dieser Tiergruppe.

Biol. Centralbl., XXIII, 510-515.

—— 1904 A

Über Zahnwechsel bei Säugetieren im erwachsenen Zustand.

Zool. Anz., XXVII, 219-222, 3 text-figs.

—— 1905 A

Ein eigenartiges Säugetierhirn, nebst Bemerkungen über den Hirnbau der Insectivora.

Anat. Anz., XXVI, 577-589, 13 text-figs.

—— 1907 A

Zur Entwicklungsgeschichte des Zahnsystems der Säugethiere, zugleich ein Beitrag zur Stammesgeschichte dieser Thiergruppe. II Theil: Phylogenie. II Heft: Die Familien der Centetidæ, Selenodontidæ und Chrysochloridæ.

Bibl. Zool., Heft 49, 1-158, pls. i-iv, 108 text-figs.

The bibliography includes 126 titles.

—— 1910 A

Zur Frage nach der stammesgeschichtlichen Bedeutung des Milchgebisses bei den Säugetieren. I Mitteilung.

Zool. Jahrb. Syst., XXVIII, 449-456, pl. ix.

—— 1912 A

Über Beziehungen zwischen Gehirn und Schädel bei den Affen.

Zool. Jahrb. Suppl. 15, II, 1-104, pls. i-iv, 45 text-figs.

Leche, W.—Continued 1915 A
Zur Frage nach der stammesgeschichtlichen Bedeutung des Milchgebisses bei den Säugetieren. II: Viverridæ, Hyænidæ, Felidæ, Mustelidæ, Creodonta.
Zool. Jahrb. Syst., XXXVIII, 275-370, 126 text-figs.
On pages 367-370 is an extensive bibliography.
——— 1915 B
Review of Bolk's odontologische Studien.
Die Naturwissenschaften, Berlin, III, 526-530.
Reviews of Bolk, L., 1913 A, 1914 A.
——— 1921 A
Morphologisch-geographische Formenreihen bei den Säugetieren.
Acta Univ. Lund (N.F.), XVI, No. 10, 1-76, 11 figs.
There is a bibliography of 94 titles.

Le Conte, John 1854 A
Description of four new species of *Kinosternum.*
Proc. Acad. Nat. Sci. Phila., 1854, 180-190.

Le Conte, Joseph 1882 A
The recent discoveries of fossil footprints in Carson, Nevada.
Amer. Naturalist, XVI, 921-923.
This is an abstract apparently of a paper published by the California Academy of Sciences as a separate only.
——— 1882 B
On certain remarkable tracks found in the rocks of Carson quarry.
Proc. Calif. Acad. Sci., v?, 1-10 (Aug. 27).
In this paper LeConte refers to some of the diagrams which accompany the paper, Gibbes, C. D., 1882 A.
——— 1883 A
Carson footprints.
Nature, XXVIII, 101-102.
——— 1887 A
The flora of the coast of California in relation to recent changes of physical geography.
Bull. Calif. Acad. Sci., II, 515-520.
Reprinted in Amer. Geologist, I, 76-81; Amer. Jour. Sci. (3), XXXIV, 457-460.

Le Damany, P. 1902 A
Quelques remarques sur l'évolution générale des membres dans la série des vertébrés.
Trav. sci. Univ. Rennes, I, 333-338.
——— 1902 B
Les torsions osseuses.
Trav. sci. Univ. Rennes, I, 371-374.

Le Damany, P.—Continued 1903 A
La torsion de l'humerus.
Trav. sci. Univ. Rennes, II, 273-274.
——— 1903 B
La transformation du fémur dans la série des vertébrés.
Trav. sci. Univ. Rennes, II, 275-276.
——— 1903 C
La torsion du fémur.
Trav. sci. Univ. Rennes, II, 277-279.
——— 1903 D
Contre l'homologie de l'olécrâne et de la rotule.
Trav. sci. Univ. Rennes, II, 349-358, 5 text-figs.
——— 1903 E
Un défaut de la hanche humaine.
Trav. sci. Univ. Rennes, II, 365-367.
——— 1903 F
Influence de la tête fémorale sur le creusement et la conservation de la cavité cotyloïde.
Trav. sci. Univ. Rennes, II, 401-408, 5 text-figs.
——— 1903 G
Les torsions osseuses; leur rôle dans la transformation des membres.
Jour. Anat. Physiol. Paris, XXXIX, 126-165, 313-337, 426-450, 534-545. 30 figs.
——— 1906 A
Le fémur, sa double transformation dans la série animale.
Jour. Anat. Physiol. Paris, XLII, 39-76, 24 figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 118-119.
——— 1906 B
L'angle sacro-pelvien.
Jour. Anat. Physiol. Paris, XLII, 153-192, 19 figs.

Ledouble, A. F. 1901 A
Les incisives des léporidés; leur croissance physiologique illimitée.
C. R. Assoc. Anatomistes, Lyon, III, 240-241, 2 figs.
——— 1903 A
Les variations des os du crâne humain.
Rev. Scient. Paris (4), XX, 641-649.
——— 1906 A
L'évolution des os de la face.
Rev. Scient. Paris, V, 546-556, 584-590.

Lee, Charles A. 1871 A
In reference to the skeleton of the mastodon found near Newburgh.
Rep. State Cabinet, N. Y. XXI, 108, footnote.

Lee, John Edward 1860 A
Structure of the scales of *Lepidotus* and *Lepidosteus*.
Geologist, III, 458-459, pl. xii.

Lee, Willis T. 1901 A
The Morrison formation of southeastern Colorado.
Jour. Geol., IX, 343-352, 4 text-figs.
Abstract in Geol. Centralbl., IX, 577.

—— 1902 A
The Morrison shales of southern Colorado and northern New Mexico.
Jour. Geol., X, 36-58, 7 figs.

—— 1903 A
Age of the Atlantosaurus beds.
Science (n.s.), XVII, 292-293.
See also Bull. Geol. Soc. Amer., XIV, 531-532.

—— 1907 A
[*Equus* 30 miles northwest of El Paso, Texas, in New Mexico.]
Science (n.s.), XXV, 32.

—— 1907 B
Afton craters of southern New Mexico.
Bull. Geol. Soc. Amer., XVIII, 211-220, pls. iii, iv.
Horse, mammoth, mastodon and tapir found near El Paso and horse 30 miles northwest in New Mexico.

—— 1913 A
Recent discovery of dinosaurs in the Tertiary.
Amer. Jour. Sci. (4), XXXV, 531-534.
Abstract in Geol. Centralbl., XX, 705.

—— 1915 A
Reasons for regarding the Morrison an introductory Cretaceous formation.
Bull. Geol. Soc. Amer., XXVI, 303-314.

—— 1917 A
Geology and paleontology of the Raton Mesa and other regions in Colorado and New Mexico.
U. S. Geol. Surv. Profess. Pap. CI, 1-221, pls. i-xxix, 15 text-figs.
Pages 17 to 37 are occupied by the bibliography of the subject.

—— 1924 A
Gizzard stones of dinosaurs exhibited.
Science, LIX, suppl., xii-xiii.

——, R. W. **Stone**: H. S. **Gale** 1915 A
Guidebook of the western United States. Part B: The Overland route with a side trip to Yellowstone Park.
Bull. U. S. Geol. Surv., DCXII, 1-244, 25 sheets, pls. i-xlix, figs. 1-20.
Abstract in Jour. Wash. Acad. Sci., V, 580.

Leenhardt, L. E. E. 1906 A
À propos des édentés fossiles de France.
Bull. Soc. géol. France (4), VI, 176.
Brief abstract in Geol. Centralbl., XI, 171.

—— 1909 A
À propos des édentés fossiles de France.
An. Mus. Nac. Buenos Aires (3), X (XVII), 103-104.

Lees, J. H. 1907 A
The skull of *Paleorhinus*, a Wyoming Phytosaur.
Jour. Geol., XV, 121-151, 8 text-figs.
Abstracts in Geol. Centralbl., XI, 332-333; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref. 440; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 169; Sci. Progress, II, 515.

Lehman-Nitsche 1900 A
[Remarks on extinction of diluvial mammals in South America.]
Corresp.-Bl. deutsch. Ges. Anthrop., XXXI, 103.

Lehrs, P. 1911 A
Der Tuatera.
Ber. Senckenb. naturf. Ges., XLII, 261-268, 1 pl.

Leidy, Joseph 1851 C
Descriptions of *Testudo lata* and *Emys hemispherica*.
Proc. Acad. Nat. Sci. Phila., V, 173.

—— 1853 H
[Lower jaw of fossil tiger.]
Proc. Amer. Philos. Soc., V, 261.
The speaker exhibited a jaw of fossil which he proposed to call *Felis atrox*. Description insufficient.

—— 1856 S
See Hay, O. P., 1902 A, 136.
Abstract in Canad. Natural. Geol., I, 239.

—— 1859 J
[Results of examination of fossil vertebrates found near Charleston, communicated in letter to Prof. F. S. Holmes.]
Proc. Acad. Nat. Sci. Phila., XI, 1859, 180-185.

—— 1866 D
Remarks on human relics at Petite Anse.
Proc. Acad. Nat. Sci. Phila., XVIII, 459.

—— 1868 K
Notice of some vertebrate remains from the West Indian islands.
Proc. Acad. Nat. Sci. Phila., 1868, 178-180.
Describes *Crocodilus pristinus*, *Testudo cubensis*, and *Megalonyx* (*Megalocnus*) *rodens*, from Cuba, and *Emys sombrerensis*, from Sombrero, W. I.

Leidy, Joseph—Continued 1870 C

Abstract of remarks made on *Elasmosaurus.*

Nature, II, 248.

—— 1873 B

See Hay, O. P., 1902 A, 141.

Notice, with list of species, in Jour. Zool. Paris, III, 1874, 55-59.

—— 1880 B

[Notes on Pleistocene mammals in California.]

Mem. Mus. Comp. Zool., VI, 256-258.

These notes form a part of J. D. Whitney's work on the "Auriferous Gravels of the Sierra Nevada."

—— 1885 C

[Letter from Dr. Neal, Archer, Fla.]

Amer. Naturalist, XIX, 834.

—— 1886 D

Toxodon and other remains from Nicaragua, Central America.

Proc. Acad. Nat. Sci. Phila., 1886, 275-277.

In Hay, O. P., 1902 A, this paper has incorrectly the designation "Leidy, J., 1888 B."

—— 1921 A

Note on *Megalonyx,* written to G. F. Becker.

Bull. Geol. Soc. Amer., II, 198.

Leigh-Sharpe, W. Harold 1921 A

The comparative morphology of the secondary sexual characters of elasmobranch fishes.

II: The claspers, clasper siphons, and clasper glands.

Jour. Morphol., XXXV, 359-380, 15 figs.

—— 1924 A

The comparative morphology of the secondary sexual characters of elasmobranch fishes. The claspers, clasper siphons, and clasper glands. Memoir vii.

Jour. Morphol., XXXIX, 565-577, 15 figs.

—— 1926 A

The comparative morphology of the secondary sexual characters of elasmobranch fishes. The claspers, clasper siphons, and clasper glands.

Jour. Morphol., XLII, 307-358, 42 figs. Memoirs viii-xi.

Leighton, M. M. 1921 A

The Pleistocene succession near Alton, Illinois, and the age of the mammalian fauna.

Jour. Geol., XXIX, 505-514.

Leighton, Virgil L. 1894 A

The development of the wing of *Sterna wilsonii.*

Tufts Coll. Stud. No. III, 63-76, 1 pl.

There is a bibliography of 20 titles.

Lelièvre, Aug. See **Retterer** and **Lelièvre.**

Lemoine, V. 1884 C

Note sur l'encéphale du gavial du Mont-Aimé étudié sur trois moulages naturels.

Bull. Soc. géol. France (3), XII, 158-162, pl. iv.

—— 1885 C

Étude sur quelques mammifères de petite taille de la faune cernaysienne des environs de Reims.

Bull. Soc. géol. France (3), XIII, 203-217, pls. x-xii.

—— 1886 A

Réponse à M. Dollo.

Bull. Soc. géol. France (3), XIV, 167-168.

—— 1889 A

Considérations générales sur les vertébrés fossiles des environs de Reims et spécialement sur les mammifères de la faune cernaysienne.

C. R. Congr.-internat. Zool., I, 1889, Paris, 239-279, 8 text-figs.

Leonard, A. G. 1912 A

Description of the Bismark quadrangle.

Folio U. S. Geol. Surv., CLXXXI, 1-8, 2 maps.

Lepkowski, W. 1897 A

Über die Gefässverteilung in den Zähnen von Säugetieren.

Anat. Hefte, Arb., VIII, 559-590, pls. xxxviii-lviii.

The bibliography presents 11 titles.

Leriche, M. 1900 A

Faune ichthyologique des Sables à unios et térédines des environs d'Epernay (Marne).

Ann. Soc. géol. Nord, XXIX, 173-200, 5 text-figs.

—— 1901 A

Sur quelques éléments nouveaux pour la faune ichthyologique du Montien inférieur du bassin de Paris.

Ann. Soc. geol. Nord, XXX, 153-161, pl. v.

—— 1901 B

Contribution à l'étude des siluridés fossiles.

Ann. Soc. géol. Nord, XXX, 165-175.

The literature cited includes 26 titles.

Leriche, M.—Continued 1902 A

Les poissons paléocenes de la Belgique.

Mém. Mus. hist. nat. Belgique, II, 1-48, pls. i-iii, 8 text-figs.

Abstract in Rev. crit. Paléozool., VII, 84-85.

—— 1902 B

Révision de la faune ichthyologique des terrains crétacés du nord de la France.

Ann. Soc. géol. Nord., XXXI, 87-155, pls. ii-iv, 4 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 482-483; Rev. crit. Paléozool., VII, 83.

Abstract in Geol. Centralbl., III, 445, 1903.

—— 1903 A

Le *Pteraspis* de Liévin (Pas-de-Calais) (*Pteraspis couchi*, Lankester).

Ann. Soc. géol. Nord, XXXII, 161-175, pls. v, vi, 2 text-figs.

—— 1905 A

Les poissons éocènes de la Belgique.

Mém. Mus. hist. nat. Belgique, III, 49-228, pls. iv-xii, text-figs. 9-64.

—— 1905 B

Note sur les *Cottus* fossiles, et en particulier sur *Cottus cervicornis* Storms du Rupélien de la Belgique.

C. R. Assoc. franc. Avanc. Sci., XXXIII (Grenoble), Notes et Mém., 677-679, pl. iii.

—— 1906 A

Note préliminaire sur les poissons des faluns néogènes de la Bretagne, de l'Anjou et de la Touraine.

Ann. Soc. géol. Nord, XXXV, 290-321.

—— 1906 B

Contribution à l'étude des poissons du nord de la France et des régions voisines.

Ann. Soc. géol. Nord, XXXV, 308-356, 2 text-figs.

—— 1906 C

Contribution à l'étude des poissons fossiles du nord de la France et des régions voisines.

Mém. Soc. géol. Nord (Lille), V, 1-430, pls. i-xvii, 79 text-figs.

Abstracts in Ann. Soc. géol. Nord., XXXV, 338-356; Rev. crit. Paléozool., XI, 82-86; Geol. Centralbl., IX, 487-491.

—— 1907 A

Sur la faune ichthyologique de l'Aquitanien marin des environs de Montpellier.

C. R. Assoc. franc. Avanc. Sci., XXXV, Lyons, 1906, 352-356, pl. iii.

Leriche, M.—Continued 1907 B

Revision de la faune ichthyologique des terrains néogènes du bassin du Rhone.

C. R. Assoc. franc. Avanc. Sci., XXXV, 1906, Lyon, Mem., 335-352.

—— 1908 A

Note sur des poissons paléocènes et éocènes des environs de Reims (Marne).

Ann. Soc. géol. Nord, XXXVII, 229-265, pls. iii-vi.

Abstracts in Geol. Centralbl., XIII, 298; Rev. crit. Paléozool., XIII, 157; Sci. Progress, IV, 674.

—— 1908 B

Première note sur les poissons carbonifères du nord de la France.

Ann. Soc. géol. Nord, XXXVII, 266-281, pls. vii, viii.

Abstracts in Geol. Centralbl., XIII, 299; Rev. crit. Paléozool., XIII, 158.

—— 1908 C

Observations sur les squales néogènes de la California.

Ann. Soc. géol. Nord, XXXVII, 302-306.

Abstracts in Geol. Centralbl., XIII, 299; Rev. crit. Paléozool., XIII, 156; Sci. Progress, IV, 674.

—— 1909 A

Note préliminaire sur des poissons nouveaux de l'Oligocène belge.

Bull. Soc. belge Géol., Proc.-verb., XXII, 378-384.

—— 1910 A

Sur quelques poissons du Crétacé du bassin de Paris.

Bull. Soc. géol. France (4), X, 455-471, pl. vi, 1 text-fig.

—— 1910 B

Note sur les poissons stampiens du bassin de Paris.

Ann. Soc. géol. Nord., XXXIX, 324-336, pl. iii.

Abstracts in Rev. crit. Paléozool., XV, 156; Geol. Centralbl., XVI, 412.

—— 1910 C

Sur le plus ancien reste connu de l'ordre des pinnipèdes.

Ann. Soc. géol. Nord., XXXIX, 369-370.

Abstract in Geol. Centralbl., XVI, 410.

Describes *Palæotaria henriettæ* from the Tongrian.

Leriche, M.—Continued 1910 D

Les poissons oligocènes de la Belgique.

Mém. Mus. hist. nat. Belgique, v, 231-363, pls. xiii-xxvi, text-figs. 65-156.

On pages 241-243 is a list of 127 works relating to the subject.

Abstract in Rev. crit. Paléozool., xv, 158-160.

—— 1911 A

Un pycnodontoïde aberrant du Sénonien du Hainaut.—Le genre *Acrotemnus* L. Agassiz.—*Acrotemnus splendens* de Koninck.

Bull. Soc. belge Géol., Proc.-verb., xxv, 162-168, pl. A, 7 text-figs.

—— 1912 A

Sur la signification des *Pteraspis* du Gedinniens de l'Ardenne et du Condroz.

Bull. Soc. belge Géol., xxvi, Proc.-verb., 39-40.

—— 1912 B

Sur la présence d'un *Pteraspis* dans le Coblentzien du massif de Dour.—Les niveaux à Ostracophores de l'Ardenne et des régions limitrophes.

Bull. Soc. belge Géol., xxvi, Proc.-verb., 49-56, pl. E.

—— 1913 A

Les poissons paléocènes de Landana (Congo). Les gisements de poissons paléocènes et éocènes de la côte occidentale d'Afrique.

Ann. Mus. Congo belge Géol. (3), i, 69-91, pls. viii-x, 6 text-figs.

—— 1924 A

Les "*Pteraspis*" du Dévonien de la Belgique.

Bull. Soc. belge Géol., xxxiii, Proc.-verb., 143-159, pls. iii, iv, 7 text-figs.

Abstract in Rev. Géol. et Sci. conn., vi, 84.

Lesbre, F. X. 1903 A

Recherches anatomiques sur les camélidés.

Arch. Mus. hist. nat. Lyon, viii, 1-196, 116 text-figs.

—— 1907 A

Contribution à l'anatomie du porc-épic commun (*Hystrix cristata*).

Arch. Mus. hist. nat. Lyon, ix, Mém. iii, 1-54, 39 text-figs.

Leuchart, Fred S. 1835 A

Ueber einen neuen eigenthümlichen Knochen des Meerschweinchens (*Cavia aperea,* Erxleb.), nebst Bemerkungen über den Zwerchfellknochen des Igels und des Dromedärs.

Tiedemann and Treviranus' Untersuchungen, etc., v, 167-174, pl. viii.

The volume examined is entitled "erster Band Heidelberg," 1825. The article preceding the one quoted has the date Nov. 1833.

Leunis (Johannes), and (Hubert) **Ludwig** 1883 A

Leunis Synopsis der Thierkunde.

3d edit., 8vo., i, i-xvi+796, 641 figs.

Leverett, F. 1889 A

Raised beaches of Lake Michigan.

Trans. Wisconsin Acad. Sci., vii, 177-192.

—— 1891 A

Pleistocene fluvial plains in western Pennsylvania.

Amer. Jour. Sci. (3), xlii, 200-212, 1 fig.

—— 1897 A

Pleistocene features and deposits of the Chicago area.

Bull. Chicago Acad. Sci., ii. (Geol. Nat. Hist. Survey), 7-87, maps and figures.

—— 1899 A

The Illinois Glacial lobe.

Mon. U. S. Geol. Surv., xxxviii, 1899, i-xxi; 1-817, 24 plates, mostly maps, 9 text-figs.

—— 1902 A

Glacial formations and drainage features of the Erie and Ohio basins.

Mon. U. S. Geol. Surv., xli, 1902, 1-302, xxvi pls.

—— See also **Russell** and **Leverett.**

Lewis, Frederic T. 1906 A

The fifth and sixth aortic arches and the related pharyngeal pouches in the rabbit and pig.

Anat. Anz., xxviii, 506, 513, 2 text-figs.

—— 1907 A

Scientific exhibits at the seventh International Zoological Congress.

Amer. Naturalist, xli, 657-671.

Lewis, Henry Carvill 1881 A

The antiquity and origin of the Trenton gravel.

In C. C. Abbott's *"Primitive Industry,"* 1881, 521-551, figs. 426-429.

—— 1883 A

The great ice age in Pennsylvania.

Jour. Franklin Inst., cxv, 287-307, map.

Lewis, Henry Carvill—Cont'd 1883 B

The geology of Philadelphia.

Jour. Franklin Inst., CXV, 359-374, 422-427.

Leydig, Franz 1850 A

Ueber die Schleimkanäle der Knochenfische.

Arch. Anat. Physiol. Med., 1850, 170-181, pl. iv.

—— 1851 A

Zur Anatomie und Histologie der *Chimæra monstrosa.*

Arch. Anat. Physiol. Med., 1851, 241-271, pl. x.

—— 1852 A

Beiträge zur mikroskopischen Anatomie und Entwicklungsgechichte der Rochen and Haie.

8vo., Leipzig, 1852, i-iv+1-127 pages, pls. i-iv.

—— 1859 A

Ueber die äusseren Bedeckungen der Säugethiere.

Arch. Anat. Physiol., Med., 1859, 677-747, pls. xix, xx.

—— 1873 A

Ueber die äusseren Bedeckungen der Reptilien und Amphibien.

Arch. mikr. Anat. Bonn., IX, 752-794, pl. xxxii.

—— 1873 B

Die Zähne einheimischer Schlangen nach Bau und Entwickelung.

Arch. mikr. Anat. Bonn., IX, 1-35, pl. i.

—— 1887 A

Das Parietalorgan der Wirbelthiere.

Zool. Anz., X, 534-539.

—— 1890 A

Das Parietalorgan der Amphibien und Reptilien.

Abh. Senckenb. naturf. Ges., XVI, 442-451, pls. i-vii.

L'Herminier, Ferdinand 1836 A

Recherches sur la marche de l'ossification dans le sternum des oiseaux.

Ann. Sci. nat. (2), VI, 107-115.

Also in C. R. Acad. Sci. Paris, III, 1836, 12-20.

Lichtenstein, R. 1840 A

Ueber *Missourium.*

Froriep's Notizen, XIII, 104-106.

Lilienthal, Gustav 1917 A

Der Einfluss der Flügelform auf die Flugart der Vögel.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1917, 261-280, 20 figs.

Lillie, D. G. 1910 A

Observations on the anatomy and general biology of some members of the larger Cetacea.

Proc. Zool. Soc. Lond., 1910, II, 769-792, pl. lxxiv, text-figs. 69-78.

Lilljeborg, Wilh. 1860 A

Bidrag till Kännedomen om tandömsningen hos *Otaria* och *Halichœrus.*

Arssk. Vetensk.-Soc., Upsala, L, 297-302.

—— 1866 A

Systematisk öfversigt af de gnagande däggdjuren, Glires.

Upsala, 4to., 1-59 pages.

Limber, John 1841 A

Fossil remains in Lenoir County, N. C.

Amer. Jour. Sci. (1), XL, 405.

There is nothing to indicate what species were found or to what age the beds belonged. Reference to the paper is made in vol. III of the N. C. Geol. and Econom. Surv., 1912, 50.

Lindemuth, A. C. 1878 A

Report on the geology of Darke County [Ohio].

Geol. Surv. Ohio, III, pt. i, Geol., 496-518.

Linder, Hermann 1913 A

Beiträge zur Kenntniss der Plesiosaurier-Gattungen *Peloneustes* und *Pliosaurus;* nebst Anhang: Ueber die beiden ersten Halswirbel der Plesiosaurier.

Geol. Pal. Abh. Jena (n.s.), XI, 339-403, pls. i-iv, 40 text-figs.

There is a list of 41 works which were consulted.

Lindgren, Waldemar 1898 A

The mining districts of the Idaho basin and the Boise Ridge.

Rep. U. S. Geol. Surv., XVIII, pt. 3, 617-719, with maps and figures.

—— 1900 A

The gold and silver veins of Silver City, DeLamar and other mining districts in Idaho.

Rep. U. S. Geol. Surv., XX, pt. 3, 65-256, pls. vii-xxxv, text-figs. 4-35.

—— 1901 A

The gold belt of the Blue Mountains of Oregon.

Rep. U. S. Geol. Surv., XXII, pt. 2, 551-776, pls. lxiii-lxxviii, text-figs. 79-88.

Lindgren, Waldemar—Cont'd 1911 A
The Tertiary gravels of the Sierra Nevada of California.
U. S. Geol. Surv. Profess. Paper LXXIII, 1-226, pls. i-xxviii, 16 text-figs.

——, and N. F. **Drake** 1904 A
Description of the Nampa [Idaho] quadrangle.
Folio U. S. Geol. Surv., CIII, 1-5, 2 maps, 4 text-figs.

—— —— 1904 B
Description of the Silver City quadrangle.
Folio U. S. Geol. Surv., CIV, 1-6, 3 maps.

Lindsay, Beatrice 1885 A
On the avian sternum.
Proc. Zool. Soc. Lond., 684-716, pls. xlii-xlv, 6 text-figs.

Lindström, G. 1895 A
Abstract in Geol. Mag. (4), II, 170.

Linnæus, Carolus 1758 A
Systema Naturæ.
Holmiæ, 1758, 8vo., Ed. 10, I, 1-824.
The systematic arrangement of the Vertebrata occupies pages 1-388.

Linstow, O. 1908 A
Die Verbreitung des Bibers im Quartär.
Abh. Ber. Mus. Natur. Heimatk., Magdeburg, I, 213-342, 2 pls.
The bibliography presents 671 titles. Abstract in Geol. Centralbl., XII, 441.

Lippincott, W. A. 1920 A
The pelvic wing in poultry.
Amer. Naturalist, LIV, 535-539, 7 figs.
The bibliography comprises 5 titles.

Lloyd, E. Russell, and C. J. **Hares** 1915 A
The Cannonball marine member of the Lance formation of North and South Dakota and its bearing on the Lance-Laramie problem.
Jour. Geol., XXXIII, 523-547, 1 text-fig.

Lloyd, J. H., and Edith M. **Sheppard** 1922 A
A contribution to the anatomy of a hammerhead shark (*Zygæna malleus* Shaw).
Proc. Zool. Soc. Lond., 1922, 971-981, 7 figs.
The bibliography presents 15 titles.

Lloyd, John Uri 1904 A
When did the American mammoth and mastodon become extinct?
Records of the Past, III, 43-46.

Lobley, J. Logan 1908 A
The American fauna and its origin.
Jour. Victoria Inst., XL, 190-221.

Lockington, William N. 1884 A
Natural history of mammals, Cetacea, Cynoidea, Æluroidea, Pinnipedia.
Stand. Nat. Hist., V, 178-209, figs. 96-111; 408-479, figs. 190-223.

Lockwood, S. 1882 A
Mastodons in New Jersey.
Amer. Jour. Sci. (3), XXIV, 294.

—— 1883 B
A mastodon in an old beaver-meadow.
Pop. Sci. Month., XXII, 341-345.

—— 1884 A
Natural history of mammals. Carnivora.
Stand. Nat. Hist., V, 353-408, figs. 172-189.

Locy, William A. 1894 A
The derivation of the pineal eye.
Anat. Anz., IX, 169-180, 5 figs.

Loder, Edmund G. 1914 A
Antlers of red deer.
Proc. Zool. Soc. Lond., 1914, pt. 2, 488-489.

Löhle, B. 1913 A
Die Bildung des Gaumens bei *Cavia cobaya.*
Morphol. Jahrb., XLVI, 595-654, 39 text-figs., pls. xv-xvi.

Lönnberg, Einar 1901 A
Pisces (Fische).
Bronn's Klass. Ordn., VI, Abth. 1, 1-48.
This part of Lönnberg's work deals with the history of ichthyology and is continued in "Lönnberg, E., 1902 A."

—— 1902 A
Pisces (Fische).
Bronn's Klass. Ordn., VI, Abth. 1, 49-99.
On pages 63-82 is a list of 229 titles of historical and faunal ichthyological works. On pages 83-99 the author discusses the origin of the Vertebrata.

—— 1903 A
On the variation of the elk (*Alces alces*).
Proc. Zool. Soc. Lond., 1902, II, 352-360, 9 text-figs.

—— 1905 A
On some fossil remains of a condor from Bolivia.
Bull. Geol. Inst. Upsala, VI, 1-11, 4 text-figs.

—— 1907 A
Notes on Steller's sea-cow.
Fauna Flora Upsala, II, 1-13, 1 fig.
The title and text are in Swedish.

Lönnberg, Einar—Continued 1907 B

A page from the history of the phylogeny of the elephants.

Fauna Flora Upsala, II, 53-69; 110-119; 10 text-figs.

Also in Vet.-Akad. Arsbok. Stockh. 1907, 173-197. In both cases the text is in Swedish.

—— 1909 A

A study of the variation of European beavers.

Arkiv Zool., V, No. 6, 1-16, 5 text-figs.

—— 1909 B

Taxonomic notes about palearctic reindeer.

Arkiv Zool., VI, No. 4, 1-18, 5 text-figs.

—— 1910 A

The object and use of tails in the case of vertebrate animals.

Fauna Flora Upsala, V, 9-25, 49-71, 118-128, 17 text-figs.

The title and the text are in Swedish.

—— 1910 B

Om hvalarnes härstamning (On the origin of whales).

Vet.-Akad. Arsbok. Stockh., 1910, 219-259, 8 text-figs.

Abstract in Nature, LXXXIV, 270-271.

—— 1911 A

On the origin of the whales.

Fauna Flora Upsala, VI, 20-46; 57-82, with illustrations.

The text is in Swedish.

—— 1911 B

Der Penisknochen zweier seltener Carnivoren.

Anat. Anz., XXXVIII, 230-232, 2 text-figs.

The two animals mentioned are *Latax lutris* and *Bassariscus sumichrasti*.

—— 1911 C

Remarks on the dentition of *Delphinapterus leucas*.

Arkiv Zool., VII, art. 2, 1-18, 7 figs.

Abstract in Nature, LXXXIV, 270.

—— 1911 D

The pelvic bones of some Cetacea.

Arkiv Zool., VII, art. 10, 1-15, 12 figs.

—— 1913 A

Notes on guanacos.

Arkiv Zool., VIII, No. 19, 1-8, 2 text-figs.

—— 1916 A

A remarkable occurrence of the first hind toe in the common fox (*Vulpes vulpes*).

Arkiv Zool., X, No. 21, 1-5, 2 figs.

Lönnberg, Einar—Continued 1922 A

On some anomalies in the dentition of *Phoca hispida*.

Bijdr. Dierk. Amsterdam, XXII (Feestnum. Max Weber), 169-178, 6 text-figs.

—— 1923 A

Remarks on some palæarctic bears.

Proc. Zool. Soc. Lond., 1923, 85-95, pls. i, ii.

—— 1924 A

Cetological notes.

Arkiv Zool., XV, No. 24, 1-17, 6 figs.

—— 1926 A

Notes on some cats from eastern Asia, with description of a new genus.

Arkiv Zool., XVIII, No. 2, 1-22, pl. i, 5 text-figs.

Loewe, Stephan 1914 A

Über das Vorkommen von Zahnerkrankungen und speziell von Karies bei fossilen Tieren.

Deutsche Monastsschr. Zahnheilk., XXXII, 787-794, pl. xii.

Lohest, M. 1888 A

Recherches sur les poissons des terrains paléozoïques de Belgique.

Ann. Soc. géol. Belgique, XV, Mém., 112-203, pls. i-xi.

Abstract in Geol. Mag. (3), VII, 40-42.

—— 1888 B

Découverte du plus ancien amphibien connu et de quelques fossiles remarkable dans le Famennien supérieur de Mohave.

Ann. Soc. géol., Belgique, XV, CXX-CXXVII, 1 fig.

Longman, Heber A. 1915 A

On a giant turtle from the Queensland Lower Cretaceous.

Mem. Queensl. Mus., III, 24-29, pl. xii, 2 text-figs.

—— 1924 A

The zoogeography of marsupials.

Mem. Queensl. Mus., VIII, pt. 1, 1-15.

There is appended a bibliography of 58 titles.

Longmuir, —— 1860 A

On the restoration of *Pterichthys* in "The Testimony of the Rocks."

Proc. Brit. Assoc. Adv. Sci., XXIX, 1859, Aberdeen, Append., 263.

Loomis, F. B. 1900 A

Abstract in Geol. Centralbl., I, 120-122, 1901.

Loomis, F. B.—Continued 1901 A

On Jurassic stratigraphy in southeastern Wyoming.

Bull. Amer. Mus. Nat. Hist., XIV, 189-197, pls. XXVI, XXVII.

—— 1904 A

Two new river reptiles from the Titanotherium beds.

Amer. Jour. Sci. (4), XVIII, 427-432, 11 text-figs.

Abstract in Geol. Centralbl., VI, 716.

—— 1904 B

On some marine fossils in the Titanothere beds.

Science (n.s.), XIX, 254.

—— 1905 A

Hyopsodidæ of the Wasatch and Wind River basins.

Amer. Jour. Sci. (4), XIX, 416-424, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, II, Ref., 133-134; Geol. Centralbl., VII, 616-617.

—— 1905 B

Momentum in variation.

Amer. Naturalist, XXXIX, 839-843, 2 text-figs.

—— 1905 C

The Amherst College expedition to the Wasatch and Wind River basins in 1904.

Science (n.s.), XXI, 296.

—— 1906 A

Wasatch and Wind River Primates.

Amer. Jour. Sci. (4), XXI, 277-285, 8 text-figs.

Abstract in Geol. Centralbl., XI, 106.

—— 1906 B

A fossil bird from the Wasatch.

Amer. Jour. Sci. (4), XXII, 481-482, 3 text-figs.

—— 1907 A

Wasatch and Wind River rodents.

Amer. Jour. Sci. (4), XXIII, 123-130, 7 text-figs.

Abstracts in Geol. Centralbl., XI, 382; Sci. Progress, II, 508.

—— 1907 B

Origin of the Wasatch deposits.

Amer. Jour. Sci. (4), XXIII, 356-364, 3 text-figs.

Abstracts in Nature, LXXVII, 117; Sci. Progress, II, 502.

Loomis, F. B.—Continued 1908 A

Rhinocerotidæ of the Lower Miocene.

Amer. Jour. Sci. (4), XXVI, 51-64, 15 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 431-435; Geol. Centralbl., XII, 595; Naturw. Rundschau, XXIII, 1908, 643; Nature, LXXX, 263.

—— 1908 B

A new horse from the Lower Miocene.

Amer. Jour. Sci. (4), XXVI, 163-165, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 429-430; Geol. Centralbl., XII, 596.

—— 1909 A

Turtles from the Upper Harrison beds.

Amer. Jour. Sci. (4), XXVIII, 17-26, 9 text-figs.

Abstracts in Geol. Centralbl., XV, 219; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 293.

—— 1909 B

Camels of the Lower Miocene.

Science (n.s.), XXIX, 196.

—— 1910 A

A new genus of peccaries.

Amer. Jour. Sci. (4), XXX, 381-384, fig. 1.

Describes *Pediohyus ferus* from the Upper Harrison beds, Nebraska.

Abstracts in Geol. Centralbl., XVI, 215; Sci. Progress, V, 671.

—— 1910 B

Osteology and affinities of the genus *Stenomylus*.

Amer. Jour. Sci. (4), XXIX, 297-323, 30 text-figs.

Abstracts in Geol. Centralbl., XV, 311; Sci. Progress, V, 670; Nature, LXXXIV, 89.

—— 1910 C

Ontogeny: a study of the value of young features in determining phylogeny.

Pop. Sci. Month., LXXVII, 292-294.

—— 1911 A

A new mink from the shell heaps of Maine.

Amer. Jour. Sci. (4), XXXI, 227-229, figs. 1, 2.

Describes *Luteiola vison antiquus*.

—— 1911 B

The camels of the Harrison beds, with three new species.

Amer. Jour. Sci. (4), XXXI, 65-70, 3 text-figs.

Abstracts in Geol. Centralbl., XVI, 215; Sci. Progress, VI, 560.

Loomis, F. B.—Continued 1911 C
The adaptations of the Primates.
Amer. Naturalist, XLV, 479-492, 6 text-figs.

—— 1915 A
A new mosasaur from the Ft. Pierre.
Amer. Jour. Sci. (4), XXXIX, 555-566, 9 text-figs.
Abstract in Geol. Zentralbl., XXV, 468.

—— 1917 A
South Carolina mastodon (abstract).
Bull. Geol. Soc. Amer., XXVIII, 210.

—— 1918 A
An unusual mastodon.
Amer. Jour. Sci. (4), XLV, 438-444, 4 text-figs.
Brief abstracts in Bull. Geol. Soc. Amer., XXVIII, 210-211; Geol. Zentralbl., XXV, 270.

—— 1919 A
An amphibian from the Eocene.
Amer. Jour. Sci. (4), XLVII, 217-219, 1 fig.
Abstract in Geol. Zentralbl., XXV, 43.

—— 1920 A
On *Ticholeptus rusticus* and the genera of Oreodontidæ.
Amer. Jour. Sci. (4), L, 281-292, 4 figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Geol. Zentralbl., XXVII, 28.

—— 1921 A
Origin of South American faunas.
Bull. Geol. Soc. Amer., XXXII, 187-196.

—— 1922 A
Derivation of South American faunas.
Pan-Amer. Geol., XXXVII, 61-63.

—— 1923 A
Oreodons of the Lower Harrison beds.
Amer. Jour. Sci. (5), VI, 222-228, 5 figs.
Abstract in Geol. Zentralbl., XXX, 539.

—— 1924 A
The oreodonts of the Lower Oligocene.
Ann. Carnegie Mus., XV, 369-378, pls. liii-liv, 3 text-figs.

—— 1924 B
Miocene oreodonts in the American Museum.
Bull. Amer. Mus. Nat. Hist., LI, art. 1, 1-37, 26 figs.

—— 1924 C
Artifacts associated with the remains of a Columbian elephant at Melbourne, Florida.
Amer. Jour. Sci. (5), VIII, 503-508, 2 figs.
Abstract in Geol. Zentralbl., XXXII, 507.

Loomis, F. B.—Continued 1925 A
Leptauchenia and *Cyclopidius*.
Amer. Jour. Sci. (5), IX, 241-249, 4 figs.

—— 1925 B
Origin and development of the artiodactyl dentition (abstract).
Bull. Geol. Soc. Amer., XXXVI, 226.

—— 1925 D
The Florida man.
Science (n.s.), LXII, 436.

—— 1925 E
Dentition of artiodactyls.
Bull. Geol. Soc. Amer., XXXVI, 583-604, 20 figs.

—— 1926 A
The evolution of the horse.
Boston, Marshall Jones Company, i-xvi+ 1-233 pages, 25 pls., 41 text-figs.
Reviewed in Amer. Jour. Sci. (5), XIV, 167-169.

—— 1926 B
Early man in Florida.
Nat. Hist., XXVI, 260-262, 2 figs.

—— 1927 A
A giant tortoise from Florida.
Amer. Jour. Sci. (5), XIII, 435-439, 2 figs.

——, and D. B. **Young** 1912 A
On the shell heaps of Maine.
Amer. Jour. Sci. (4), XXXIV, 17-42, 16 text-figs.

—— See **Gidley** and **Loomis**, 1926 A.

Loomis, Leverett Mills 1923 A
On the classification of the albatrosses, petrels, and diving petrels.
Auk, XL, 596-602.

Loper, S. Ward 1893 A
A new fossil fish (*Ischypterus newberryi*).
Pop. Sci. News, XXVII, 75, 1 fig.

—— 1899 A
Fossiliferous black shales.
Pop. Sci., XXXIII, 97-98, 3 figs.
Figures 2 fossil fishes from the Triassic of Connecticut.

Lorenz, Ludovic E. F. 1807 A
Observationes anatomicæ de pelvi reptilium. Speciminis loco inauguralis.
Halæ Saxonum, 8vo., 1-60 pages, 1 plate.

Lorenz, Ludwig 1904 A
Das Becken der Stellerschen Seekuh.
Abh. geol. Reichsanst. Wien, XIX, pt. 3, 1-11, pl. i, 2 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 124-125.

—— 1904 B
Ueber das Becken der Sirenen.
Verh. zool.-bot. Ges. Wien, L, 142-143.

Lorenz, Ludwig—Continued 1908 A

Die in historischer Zeit ausgestorbenen Vögel.

Verh. zool.-bot. Ges. Wien, LVIII, 217-232.

Gives a list of all the birds known to have become extinct within historical times.

Lortet, L. 1887 A

Note sur le *Rhizoprion bariensis* Jourdan.

Arch. Mus. hist. nat. Lyon (1), IV, 315-319, pls. XXV^{bis} et XXV^{ter}.

Lotichius, A. 1911 A

Der Säbeltiger.

Ber. Senckenb. naturf. Ges., XLII, 268-279, 2 pls.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 501.

Louderback, George Davis 1907 A

Where mammoths roved. Recent remarkable discoveries in Carson, Nevada.

Sunset Mag., XIX, 205-216, 8 illustrations.

—— 1924 A

Period of scarp production in the Great Basin.

Bull. Dept. Geol. Univ. Calif., XV, 1-44, 2 pls., 3 text-figs.

Low, James W. 1926 A

The pelvic girdle in the batrachian *Menopoma alleghaniense* Harlan.

Proc. Zool. Soc. Lond., 1926, 913-926, 4 figs.

There is a bibliography of 15 titles.

Lubosch, Wilhelm 1906 A

Ueber das Kiefergelenk der Monotremen.

Jena Zeitschr. Naturwiss., XLI (N.F. XXXIV), 549-606, pls. XXVI-XXIX, 5 text-figs.

The bibliography presents 37 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 61-64.

—— 1906 B

Über Variationen am Tuberculum articulare des Kiefergelenks des Menschen und ihre morphologische Bedeutung.

Morphol. Jahrb., XXXIII, 322-353, 16 figs.

There is a bibliography of 35 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 59-61.

—— 1907 A

Universelle und spezialisierte Kaubewegungen bei Säugetieren.

Biol. Centralbl., XXVII, 613-624.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 69-71.

Lubosch, Wilhelm—Continued 1908 A

Ueber Wirbeltiergelenke.

Anat. Anz., Ergänzungsh., XXXII, 192-208, 12 text-figs.

—— 1908 B

Das Kiefergelenk der Edentaten und Marsupialier; nebst Mittheilungen über die Kaumuskulatur dieser Thiere.

Semon's "Zool. Forschungsr.," IV, lfg. 4 (Denk. med. naturw. Gesellsch. Jena, VII), 519-556, pls. XXXI-XXXV, 9 text-figs.

Appended is a bibliography of 18 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 71-75.

—— 1909 A

Anpassungserscheinungen bei der Verkalkung des Selachierknorpels.

Anat. Anz., XXXV, 1-8, 8 figs.

The bibliography presents 6 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 141.

—— 1911 A

Allgemeine und spezielle Bemerkungen über Methode. Inhalt und Wert der Kritik, die Fuchs an meinen Untersuchungen über das Kiefergelenk der Säugetiere geübt hat.

Anat. Anz., XXXVIII, 310-333.

Prefixed is a list of 10 recent papers by Drüner, Fuchs and Lubosch dealing with the subject.

—— 1911 B

Was lehrt die Phylogenese der Gelenke für die Beurteilung des Kaugelenkes der Säugetiere?

Biol. Centralbl., XXXI, 738-751.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 68-70.

—— 1914 A

Review of Abel's "Grundzüge der Paläobiologie der Wirbeltiere" (Abel, O., 1912 F).

Naturwiss. Berlin, II, 424-425.

—— 1923 A

Die Bildung des Markknochens beim Hühnchen und Säugetieren und das Wesen der enchondralen Ossification in historischer Betrachtung.

Morphol. Jahrb., LIII, 49-93, 17 figs.

The bibliography occupies pages 92-93.

—— 1926 A

Über die Gliederung der Rippen bei Amnioten.

Verh. Anat. Ges., XXXV, 103-117, 17 figs.

There are 6 titles in the bibliography.

Lubsen, J. 1905 A

Untersuchungen zur vergleichenden Segmental-Anatomie.

Petrus Camper. Bijdr. Anat., III, 431-484, 26 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 64.

Lucae, Johann Christian 1872 A

Die Robbe und die Otter in ihrem Knochen- und Muskelskelet.

Abh. Senckenb. naturf. Ges., VIII, 277-378, pls. i-xiv, 8 text-figs.

—— 1875 A

Die Robbe und die Otter in ihrem Knochen- und Muskelskelet.

Abh. Senckenb. naturf. Ges., IX, 369-496, pls. i-xvii.

This paper is devoted principally to a consideration of the muscles.

Lucas, F. A. 1887 A

Osteological note.

Science (o.s.), IX, 460-461.

On rudimentary metacarpals in *Bison*.

—— 1890 B

Description of some bones of Pallas' cormorant (*Phalacrocorax perspicillatus*).

Proc. U. S. Nat. Mus., XII, 88-94, pls. ii-iv.

—— 1890 C

The expedition to Funk Island, with observations upon the history and anatomy of the great auk.

Rep. U. S. Nat. Mus., 1887-1888, 493-529, pls. lxxi-lxxiii.

—— 1894 A

The bird's foot.

Nat. Sci., V, 208-210, 395-396.

—— 1894 B

Notes on the air-sacs and hollow bones of birds.

Nat. Sci., IV, 36-37.

—— 1898 E

Occurrence of mammoth remains on the Pribilof Islands.

Science (n.s.), VIII, 718.

—— 1900 B

Abstract in Geol. Centralbl., II, 120.

—— 1900 D

Abstract in Geol. Centralbl., II, 762.

—— 1900 E

Abstract in Geol. Centralbl., II, 763.

—— 1900 F

Abstract in Geol. Centralbl., II, 765.

Lucas, F. A.—Continued 1900 G

Description of a new species of fossil fish from the Esmeralda formation.

Rep. U. S. Geol. Surv., XXI, pt. ii, 223-224, pl. xxxi.

Abstracts in Geol. Centralbl., II, 90; Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 477; Rev. crit. Paléozool., V, 157.

—— 1900 H

Vertebrate fossils found in Idaho beds.

Rep. U. S. Geol. Surv., XX, pt. iii, 99.

—— 1901 A

Former land connections between Asia and North America.

Science (n.s.), XIII, 307.

—— 1901 B

Vertebrates from the Trias of Arizona.

Science (n.s.), XIV, 376.

Abstract in Geol. Centralbl., III, 99.

—— 1901 C

The phylogeny of the toothed whales.

Science (n.s.), XIV, 618-619.

—— 1901 D

A new dinosaur, *Stegosaurus marshi*, from the Lower Cretaceous of South Dakota.

Proc. U. S. Nat. Mus., XXIII, 591-592, pls. xxiii, xxiv.

Abstracts in Geol. Centralbl., II, 764; Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 475; Rev. crit. Paléozool., VI, 10.

—— 1901 E

A flightless auk, *Mancalla californiensis*, from the Miocene of California.

Proc. U. S. Nat. Mus., XXIV, 133-134, 3 text-figs.

Abstracts in Geol. Centralbl., III, 118; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 460; Rev. crit. Paléozool., VI, 101; Naturw. Wochenschr., XVII (N.F.), 379.

—— 1901 F

The restoration of extinct animals.

Rep. Smithson. Instn. for 1900, 479-492, pls. i-viii, 2 text-figs.

—— 1901 G

A fossil, flightless auk.

Science (n.s.), XIII, 428-429.

—— 1901 H

Some restorations of dinosaurs.

Science (n.s.), XIII, 586.

Lucas, F. A.—Continued 1901 I

The truth about the mammoth.

Rep. Smithson. Instn., for 1899, 353-359, pls. i-iv.

Reprinted from McClure's Magazine, Feb. 1900.

—— 1901 J

Animals of the past.

8vo., New York, i-xx+1-258 pages, 41 figs.

Review in Science (n.s.), XXXVIII, 779-780.

—— 1902 A

Paleontological notes. North American elephantids.

Science (n.s.), XV, 554-555.

Brief notice in Geol. Centralbl., IX, 581.

—— 1902 B

Animals before man in North America.

New York, D. Appleton Co., 8vo., 1-291 pages, many figures.

—— 1902 C

The dinosaurs, or terrible lizards.

Rep. Smithson. Instn. for 1901, 641-647, pls. i-iv.

Abstract in Rev. crit. Paléozool., VIII, 11-12.

—— 1902 D

The greatest flying creature, the great pterodactyl *Ornithostoma.*

Rep. Smithson. Instn. for 1901, 654-659, pls. vi-vii, 1 text-fig.

Abstracts in Geol. Centralbl., IX, 582; Neues Jahrb. Min. Geol. Pal., 1905, 1, Ref., 516.

Reprinted in Scient. Amer. Suppl., LV, 22645-22646.

—— 1902 E

The armor of *Stegosaurus.*

Science (n.s.), XV, 469.

—— 1902 F

Paleontological notes. The generic name *Omosaurus.*

Science (n.s.), XVI, 435.

Proposes *Hoplitosaurus* for *Stegosaurus marshi.*

Abstract in Geol. Centralbl., IX, 582.

—— 1902 G

Orange County mastodons.

Science (n.s.), XVI, 669.

—— 1902 H

Clark on the classification of birds.

Auk, XIX, 95-96.

—— 1902 I

Constructing an extinct monster from fossil remains.

Scient. Amer., LXXXVI, 43, 3 text-figs.

Lucas, F. A.—Continued 1902 J

Note on fossil horse teeth found in Alaska.

U. S. Geol. Surv. Profess. Pap., II, 27.

—— 1903 A

Notes on the osteology and relationship of the fossil birds of the genera *Hesperornis, Hargeria, Baptornis,* and *Diatryma.*

Proc. U. S. Nat. Mus., XXVI, 545-556, 8 text-figs.

Abstracts in Geol. Centralbl., V, 327; Rev. crit. Paléozool., VIII, 5.

—— 1903 B

The great auk.

Science (n.s.), XVII, 311-312.

—— 1903 C

A skeleton of *Hesperornis.*

Smithson. Misc. Coll., XLV, 95, pl. xxvii.

Abstract in Geol. Centralbl., V, 376; also in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 173.

—— 1903 D

A new plesiosaur.

Smithson. Misc. Coll., XLV, 96, pl. xxviii.

Abstracts in Geol. Centralbl., V, 377; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 167; Rev. crit. Paléozool., IX, 126.

—— 1904 A

A new batrachian and a new reptile from the Trias of Arizona.

Proc. U. S. Nat. Mus., XXVII, 193-195, pls. iii, iv.

Abstracts in Geol. Centralbl., V, 377; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 162; Rev. crit. Paléozool., VIII, 157.

—— 1904 B

Paleontological notes.

Science (n.s.), XIX, 436-437.

—— 1904 C

The dinosaur *Trachodon annectans.*

Smithson. Misc. Coll., XLV, 317-320, pls. lxxii, lxxiii, text-figs. 40-43.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 172; Geol. Centralbl., VII, 427; Rev. crit. Paléozool., IX, 121.

—— 1904 D

Eocene whales.

Nature, LXXI, 102.

Abstract in Geol. Centralbl., IX, 581.

—— 1904 E

The swallowing of stones by seals.

Science (n.s.), XX, 537-538.

—— 1904 F

List of vertebrate bones in Nampa [Idaho] quadrangle.

Folio U. S. Geol. Surv., CIII, 1-5, 2 maps.

Lucas, F. A.—Continued 1906 A

The elephants of the Pleistocene.

Maryland Geol. Surv. Pliocene and Pleistocene, Baltimore, 1906, 149-152, pls. xxxii, xxxiii.

Abstract in Geol. Centralbl., xi, 382.

—— 1906 B

Mammalia [of the Pleistocene of Maryland].

Maryland Geol. Surv. Pliocene and Pleistocene, Baltimore, 1906. 157-169, pls. xxxiv-xl.

—— 1906 C

Notes on some recent additions to the exhibition series of vertebrate fossils in the U. S. National Museum.

Science (n.s.), xxiii, 955.

—— 1906 D

The penguins.

Science (n.s.), xxiv, 316-317.

—— 1907 A

Momentum in variation.

Amer. Naturalist, xli, 46-47.

A criticism of Loomis, F. B., 1905 B.

—— 1907 B

The tusks and size of the northern mammoth.

Science (n.s.), xxvi, 836-837.

—— 1908 A

Is *Alabamornis* a bird?

Science (n.s.), xxvii, 311.

—— 1908 B

The size of the mammoth.

Nature, lxxviii, 443.

Abstracts in Geol. Centralbl., xii, 297; Sci. Progress, iii, 456.

—— 1910 A

The armour of *Stegosaurus*.

Nature, lxxxv, 73.

Abstract in Sci. Progress, v, 682.

—— 1910 B

Remark on *Alabamornis*.

Nature, lxxxv, 278.

—— 1911 A

Note on the ribs of *Brachiosaurus*.

Nature, lxxxvii, 18.

—— 1916 A

The beginnings of flight.

Amer. Mus. Jour., xvi, 5-11, 9 ills.

—— 1916 B

Sea cows, past and present.

Amer. Mus. Jour., xvi, 315-318, 3 figs.

Lühder, Wilhelm 1871 A

Zur Bildung des Brustbeins und Schultergürtels der Vögel.

Jour. Ornith., xix, 321-353.

Lütken, Christian 1868 C

Om Ganoidernes Begraendsning og Inddeling.

Vid. Medd. nat. For. Kjöbenh., 1868, 1-82, 14 text-figs.

For a résumé by the author see Arch. Sci. Phys. Nat., iv, 1871, 283-296; Abstracts in Neues Jahrb. Min. Geol. Pal., 1870, 594-603; Ann. Mag. Nat. Hist. (4), vii, 329-339.

—— 1871 A

Sur les limites et la classification des ganoides.

Arch. Sci. Phys. Nat., xl, 283-296.

—— 1874 A

Sur les différences dans la dentition que présentent, selon le sexe, les raies (*Raja*) qui habitent les côtes du Danemark.

Jour. Zool. Paris, iii, 318-321.

Abstract of paper in Vid. Medd. Nat. Kjöbenh., 1873.

—— 1881 A

Spolia atlantica: Contributions to the knowledge of the changes of form in fishes during their growth and development, especially in the pelagic fishes of the Atlantic.

Ann. Mag. Nat. Hist. (5), vii, 1-14; 107-123.

Lull, Richard S. 1903 A

Skull of *Triceratops serratus*.

Bull. Amer. Mus. Nat. Hist., xix, 685-695, pls. lix, lx, 1 text-fig.

Abstract in Geol. Centralbl., v, 376; Jahresber. Anat. Entwickl. (N.F.) x, Abth. 3, 172.

—— 1904 A

Fossil footprints of the Jura-Trias of North America.

Mem. Boston Soc. Nat. Hist., v, 461-557, pl. lxxii, 34 text-figs.

An abstract of this paper by its author is found in the Amer. Jour. Sci. (4), xvii, 402-405. See also abstract in Geol. Centralbl., vii, 619.

—— 1904 B

Note on the probable footprints of *Stegomus longipes*.

Amer. Jour. Sci. (4), xvii, 381-382, 1 text-fig.

Abstract in Geol. Centralbl., vii, 427.

Lull, Richard S.—Continued 1904 C

Adaptations to aquatic, arboreal, fossorial and cursorial habits in mammals. IV: Cursorial adaptations.

Amer. Naturalist, XXXVIII, 1-11.

Abstract in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 138-139.

—— 1904 D

Nature's hieroglyphics.

Pop. Sci. Month., LXVI, 139-149, 7 figs.

Abstract in Geol. Centralbl., IX, 582.

—— 1905 A

Restoration of the horned dinosaur *Diceratops*.

Amer. Jour. Sci. (4), XX, 420-422, pl. xiv.

Abstracts in Geol. Centralbl., VIII, 378; XI, 108; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 143; Nature, LXXIII, 205.

—— 1905 B

Restoration of the titanothere *Megacerops*.

Amer. Naturalist, XXXIX, 419-424, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 173.

—— 1905 C

Footprint interpretation.

Science (n.s.), XXI, 299.

—— 1905 D

Megacerops tyleri, a new species of titanothere from the Bad Lands of South Dakota.

Jour. Geol., XIII, 443-456, pls. iii, iv, 2 text-figs.

Abstracts in Geol. Centralbl., VIII, 378; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 173.

—— 1906 A

A new name for the dinosaurian genus *Ceratops*.

Amer. Jour. Sci. (4), XXI, 144.

Abstracts in Geol. Centralbl., VIII, 378; Nature, LXXIII, 1906, 422; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 142.

—— 1906 B

Volant adaptation in vertebrates.

Amer. Naturalist, XL, 537-566, 14 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 122-123; Geol. Centralbl., XI, 425; Nature, London, LXXIV, 415.

—— 1907 A

The evolution of the horse family, as illustrated in the Yale collections.

Amer. Jour. Sci. (4), XXIII, 161-182, 16 text-figs.

Abstracts in Geol. Centralbl., XI, 472; Rev. crit. Paléozool., XI, 220; Sci. Progress, II, 510.

Lull, Richard S.—Continued 1907 B

Phylogeny, taxonomy, distribution, habits and environment of the *Ceratopsia*.

Mon. U. S. Geol. Surv., XLIX, 159-198; 295-300; pls. i-li, text-figs. 121-125.

Abstracts in Rev. crit. Paléozool., XIII, 76; Amer. Jour. Sci. (4), XXVI, 98-99; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 160.

—— 1908 A

The evolution of the elephant.

Amer. Jour. Sci. (4), XXV, 169-212, figs. 1-27, 4 charts.

Notes in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 136; Rev. crit. Paléozool., XII, 235.

Abstracts in Geol. Centralbl., XIII, 203; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 162.

—— 1908 B

The cranial musculature and the origin of the frill in the ceratopsian dinosaurs.

Amer. Jour. Sci. (4), XXV, 387-399, pls. i-iii, 10 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 450; Nature, LXXVIII, 109; Sci. Progress, III, 460; Rev. crit. Paléozool., XIII, 10-11.

—— 1908 C

A comparative study of the musculature of the chameleon and a chelonian.

Science (n.s.), XXVII, 255.

—— 1909 A

The evolution of the elephant.

Rep. Smithson. Instn. for 1908, 641-675, pls. i, ii, 25 text-figs., 4 charts.

Abstract in Sci. Progress, IV, 663.

—— 1909 B

A four-horned pelycosaurian from the Permian of Texas.

Amer. Jour. ci. (4), XXVII, 93.

Review of W. D. Matthew's paper under above title (Matthew, W. D., 1908 B).

—— 1910 A

Dinosaurian distribution.

Amer. Jour. Sci. (4), XXIX, 1-39, 10 text-figs.

The paper is followed by a list of works on the *Dinosauria*.

Abstracts in Geol. Centralbl., XV, 311; Nature, London, LXXXV, 1900, 285; Sci. Progress, V, 677-678; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 299; Rev. crit. Paléozool., XIV, 175; Nature, LXXXII, 437.

Lull, Richard S.—Continued 1910 B

Armor of *Stegosaurus*.

Amer. Jour. Sci. (4), xxix, 201-210, 11 text-figs.

Abstracts in Geol. Centralbl., xv, 311; Neues Jahrb. Min. Geol. Pal., 1910, ii, Ref., 289; Rev. crit. Paléozool., xiv, 174; Nature, lxxxviii, 137; Sci. Progress, v, 681.

—— 1910 C

Stegosaurus ungulatus Marsh, recently mounted at the Peabody Museum of Yale University.

Amer. Jour. Sci. (4), xxx, 361-377, pl. ii, 10 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, i, Ref., 320; Geol. Centralbl., xvi, 218; Sci. Progress, v, 681; Rev. crit. Paléozool., xv, 147-149.

—— 1910 D

Relation of embryology and vertebrate paleontology.

Pop. Sci. Month. lxxvii, 150-153.

Abstracts in Nature, lxxxiv, 211; Rev. crit. Paléozool., xxi, 42.

—— 1911 A

Note on the parietal crest of *Centrosaurus apertus* and a proposed new name for *Stereocephalus tutus;* by Lawrence M. Lambe.—A review.

Amer. Jour. Sci. (4), xxxi, 339.

—— 1911 B

The Reptilia of the Arundel formation.

Maryland Geol. Surv. Lower Cretaceous, 173-178.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, ii, Ref., 146-147; Geol. Centralbl., xviii, 523; Rev. crit. Paléozool., xviii, 1.

—— 1911 C

Systematic paleontology of the Lower Cretaceous deposits of Maryland. Dinosauria.

Maryland Geol. Surv. Lower Cretaceous, 183-211, pls. xi-xx.

Abstracts in Geol. Centralbl., xvii, 562-567; xviii, 515; Neues Jahrb. Min. Geol. Pal., 1912, ii, Ref., 121; Rev. crit. Paléozool., xviii, 2.

—— 1912 A

Symposium on ten years' progress in vertebrate paleontology. Cretaceous dinosaurs.

Bull. Geol. Soc. Amer., xxiii, 208-212.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Hay, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

Abstract in Rev. crit. Paléozool., xvii, 73.

Lull, Richard S.—Continued 1912 B

The evolution of the Ceratopsia.

Proc. Internat. Zool. Congr., vii, Boston, 1907, 771-777.

Reprints were evidently issued in 1910, before the complete volume.

Abstracts in Nature, lxxxiv, 1910, 89; Neues Jahrb. Min. Geol. Pal., 1910, ii, Ref., 301; Rev. crit. Paléozool., xv, 154-155.

—— 1912 C

The armored dinosaur *Stegosaurus ungulatus*, recently restored at Yale University.

Verh. internat. Zool.-Kongr., viii, Graz, 1910, 672-681, 4 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, ii, Ref., 148.

—— 1912 D

The life of the Connecticut Trias.

Amer. Jour. Sci. (4), xxxiii, 397-422, 5 figs.

There is a list of the fishes from Eastman, C. R., 1911 A; also a bibliography of 13 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, ii, 120; Geol. Centralbl., xviii, 559; Rev. crit. Paléozool., xvii, 77.

—— 1913 A

The Yale collection of fossil horses.

Coll. Yale Univ., No. 1, 1-12, 11 text-figs.

—— 1913 B

The Yale expedition of 1912.

Bull. Geol. Soc. Amer., xxiv, 117.

—— 1914 A

Fossil dolphin from California.

Amer. Jour. Sci. (4), xxxvii, 209-220, pl. viii, 7 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, i, Ref., 137-138; Geol. Zentralbl., xxi, 238; Nature xcv, 355.

—— 1914 B

Note on the Farmington [Conn.] specimen [of *Mammut americanum*].

Amer. Jour. Sci. (4), xxxvii, 329-330.

Abstracts in Rev. crit. Paléozool., xviii, 153; Bull. Geol. Soc. Amer., xxv, 143.

—— 1914 C

New mastodon find in Connecticut.

Bull. Geol. Soc. America, xxv, 143.

A brief abstract.

—— 1914 D

Rulers of the Mesozoic.

Yale Review (n.s.), iii, 352-363.

—— 1914 E

Elephants and their progenitors.

Sci. Conspectus, iv, 61-70, 2 pls., 8 figs.

Lull, Richard S.—Continued 1915 A

Triassic life of the Connecticut valley.

Bull. Geol. and Nat. Hist. Surv. Conn., XXIV, 1-285, 12 plates, 4 maps, 126 figures.

There are presented lists of the species of vertebrates found at each of 42 localities.

Abstract in Nature, London, XCVI, 657; Rev. crit. Paléozool., XX, 90.

For Lull's list of species see Abel, O., 1926 B, 25-27.

—— 1915 B

A Pleistocene ground sloth, *Mylodon harlani*, from Rock Creek, Texas.

Amer. Jour. Sci. (4), XXXIX, 327-385, 16 text-figs.

Abstracts in Rev. crit. Paléozool., XX, 88; Geol. Zentralbl., XXV, 271.

—— 1915 C

Sauropoda and Stegosauria of the Morrison of North America compared with those of Europe and eastern Africa.

Bull. Geol. Soc. Amer., XXVI, 323-334.

Abstract in Rev. crit. Paléozool., XX, 3.

—— 1915 D

The mammals and horned dinosaurs of the Lance formation of Niobrara County, Wyoming.

Amer. Jour. Sci. (4), XL, 319-348, 5 text-figs.

Abstract in Geol. Zentralbl., XXV, 272.

—— 1915 E

Ant-hill fossils.

Pop. Sci. Month., 1915, 236-243, 4 text-figs.

—— 1915 F

Dinosaurs, the rulers of the Mesozoic.

Schuchert and Pirsson's "Text-book of Geology," 831-843, pls. XXXI-XXXIII.

—— 1915 G

Review of Williston's "Water reptiles of the past and present."

Science (n.s.), XLI, 391-392.

—— 1917 A

On the functions of the "sacral brain" in dinosaurs.

Amer. Jour. Sci. (4), XLIV, 471-477.

Abstract in Rev. crit. Paléozool., XXIV, 88.

—— 1917 B

Organic evolution. A text-book.

8vo., i-xviii+1-729 pages, pls. i-xxx, 253 text-figs.

Abstract in Rev. crit., Paléozool., XXII, 51-55. Brief review in Jour. Geol., XXVI, 285.

Lull, Richard S.—Continued 1917 C

Barosaurus: A gigantic sauropod dinosaur.

Bull. Geol. Soc. Amer., XXVIII, 214 (abstract).

—— 1917 D

The Triassic fauna and flora of the Connecticut valley.

Bull. U. S. Geol. Surv., DXCVII, 105-127, pls. iii, iv.

—— 1917 E

Horned artiodactyl from the Tertiary of Nebraska.

Bull. Geol. Soc. Amer., XXVIII, 211.

—— 1917 F

Brontotherium: A new mount in the Yale Museum.

Bull. Geol. Soc. Amer., XXVIII, 214 (abstract).

—— 1918 A

Fossil footprints from the Grand Canyon of the Colorado.

Amer. Jour. Sci. (4), XLV, 337-346, pls. i-iii, 3 text-figs.

Abstracts in Rev. crit. Paléozool., XXII, 107; Geol. Zentralbl., XXV, 43.

—— 1918 B

The development of vertebrate paleontology.

Amer. Jour. Sci. (4), XLVI, 193-221.

—— 1918 C

The pulse of life.

Chap. IV, 109-146, figs. 14-30, of "The Evolution of the Earth and its Inhabitants." 8vo., New Haven, 1918.

—— 1919 A

Samuel Wendell Williston.

Amer. Jour. Sci. (4), XLVIII, 220-224.

An obituary notice.

—— 1919 B

Review of papers by C. W. Gilmore (Gilmore, C. W., 1914 A and 1918 C).

Amer. Jour. Sci. (4), XLVII, 236-238.

—— 1919 C

The sauropod dinosaur *Barosaurus* Marsh.

Mem. Conn. Acad. Sci., VI, 1-42, pls. i-vii, 10 text-figs.

Abstracts in Rev. crit. Paléozool., XXIV, 147; Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 253; Nature, CV, 117.

—— 1920 A

New Tertiary artiodactyls.

Amer. Jour. Sci. (4), L, 83-130, pl. i, 25 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 1923, 98; Geol. Zentralbl., XXVI, 505; Nature, CVI, 189.

Review in Rev. crit. Paléozool., XXVII, 16.

Lull, Richard S.—Continued 1920 B

An Upper Carboniferous footprint from Attleboro, Massachusetts.

Amer. Jour. Sci. (4), L, 234-236, 1 fig.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 95; Nature, CVIII, 482.

Review in Rev. crit. Paléozool., XXVII, 13.

—— 1921 A

The Cretaceous armored dinosaur *Nodosaurus textilis* Marsh.

Amer. Jour. Sci. (5), I, 98-126, pls. i-iv, 7 text-figs.

The bibliography records 16 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 254; Rev. Géol. et Sci. conn., IV, 1923, 95; Geol. Zentralbl., XXVIII, 507.

Review in Rev. crit. Paléozool., XXVII, 13.

—— 1921 B

Fauna of the Dallas sand pits.

Amer. Jour. Sci. (5), II, 159, 176, figs. 1-5.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 99; Geol. Zentralbl., XXVII, 184.

Review in Rev. crit. Paléozool., XXVII, 17.

—— 1921 C

New camels in the Marsh collection.

Amer. Jour. Sci. (5), I, 392-404, figs. 1-5.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 1923, 99; Geol. Zentralbl., XXVII, 29.

Review in Rev. crit. Paléozool., XXVII, 17.

—— 1922 A

Restoration of *Blastomeryx marshi*.

Amer. Jour. Sci. (5), III, 158-161, 2 figs.

Abstracts in Rev. Geol. et Sci. conn., V, 111; Rev. crit. Paléozool., XXVIII, 6, 1924; Geol. Zentralbl., XXVIII, 153; Neues Jahrb. Min. Geol. Pal., 1923, I, 317-318.

—— 1922 B

Primitive Pecora in the Yale Museum.

Amer. Jour. Sci. (5), IV, 111-119, 1 fig.

There is a bibliography of 9 titles. Abstracts in Rev. Géol. et Sci. conn., V, 110-111; Rev. crit. Paléozool., XXVII, 214; XXVIII, 6; Neues Jahrb. Min. Geol. Pal., 1924, I, 414; Geol. Zentralbl., XXIX, 221.

—— 1922 C

Variations or specific distinctions: Which?

Bull. Geol. Soc. Amer., XXXIII, 599, 604.

—— 1922 D

Abstract of Branislaw Petronievics' "Über das Becken, den Schultergürtel, etc., der Londoner *Archæopteryx*."

Amer. Jour. Sci. (4), III, 382-383.

Lull, Richard S.—Continued 1924 A

Dinosaurian climatic response.

Chapter VII of *"Organic adaptation to environment."* New Haven. Yale University Press. Pages 225-279, figs. 22-34, and chart.

The bibliography comprises 40 titles.

Abstract in Geol. Zentralbl., XXXII, 507.

—— 1924 B

Samuel Wendell Williston, 1852-1918.

Mem. Nat. Acad. Sci., XVII, 115-141, portrait.

Pages 136-141 are occupied by lists of his scientific papers. Of these 12 are concerned with geology; 9 with anthropological questions, 138 with vertebrate palæontology.

—— 1926 A

Early fossil hunting in the Rocky Mountains.

Nat. Hist., XXVI, 455-462, 5 figs.

—— 1926 B

Yale's great new museum of evolution.

Scient. Amer., Oct. 1926, 278-279, illustrations.

—— 1927 A

A new footprint locality.

Amer. Jour. Sci. (5), XIV, 48, 49, fig. 1.

—— See also **Huene** and **Lull**.

Lund, Peter Wilhelm 1838 A

[A brief report on the investigations of the fossil mammals of the caves of Minas Geraes, Brazil.]

Danske Vidensk. Selsk. Forh. Overs., 1838, 7-15.

—— 1839 C

[A brief report on further investigations of the fossil mammals of the caves of Minas Geraes, Brazil.]

Danske Vidensk. Selsk. Forh. Overs., 1839, 19-23.

—— 1841 A

Blik paa Brasiliens Dryeverden för sidste Jordomvaeltning.

Danske Vid. Selsk. Afhandl., VIII, 27-57, 61-86, 217-296, pls. i-xxvii.

Lurje, Mira 1906 A

Über die Pneumatisation des Taubenschädels.

Anat. Hefte, Arb., XXXI, 1-61, pls. i-x, 1 fig.

The bibliography includes 11 titles.

Luthe, Walter 1924 A

Ueber die Fusswurzelknochen der Fischottern.

Arch. Naturges, XC, Abt. A, Heft 4, 59-141, pls. i-vii, 7 text-figs.

The bibliography presents 16 titles.

Luther, A. 1909 A

Beiträge zur Kenntnis von Muskulatur und Skelett des Kopfes des Haies *Stegostoma tigrinum* Gm. und der Holocephalen; mit einem Anhang über die Nasenrinne.

There is a bibliography of 73 titles.

—— 1913 A

Beiträge zur Kenntnis des Kopfskelets der Knorpelganoiden.

Acta. Soc. Sci. Fenn., XLI, art. 8, 1-26, 10 text-figs.

A bibliography of 40 titles is appended.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 77-80.

—— 1913 B

Ueber die vom N. trigeminus versorgte Muskulatur der Ganoiden und Dipneusten.

Acta Soc. Sci. Fenn., XLI, art. 9, 1-72, 1 pl., 28 text-figs.

There is appended a bibliography of 77 titles.

Lwoff, W. 1884 A

Beiträge zur Histologie der Haut der Reptilien.

Bull. Soc. Natural. Moscou, LX, 313-334, pl. ix.

Lydekker, R. 1879 A

Elementary sketch of the osteology of birds.

Stray Feathers, Calcutta, VIII, 1-36, 4 pls.

—— 1882 B

Siwalik Camelopardalidæ.

Mem. Geol. Surv. India. Palæont. Indica (ser. 10), II, 99-142 (33-44), pls. xvi-xxii.

—— 1884 C

See Hay, O. P., 1902 A, p. 147.

Reviewed in Ann. Mag. Nat. Hist. (5), XVI, 66-72.

—— 1885 F

The labyrinthodont from the Bijori Group.

Palæont. Ind. (4), I, pt. 4, 1-16, pls. l-lv.

—— 1885 G

The Reptilia and Amphibia of the Maleri and Denwa groups.

Palæont. Ind. (4), I, pt. 5, 1-38, pls. i-vi.

—— 1886 F

On the occurrence of the crocodilian genus *Tomistoma* in the Miocene of the Maltese Islands.

Quart. Jour. Geol. Soc., XLII, 20-22, pl. ii.

—— 1886 G

M. L. Dollo on new chelonians from the Eocene of Belgium.

Geol. Mag. (3), III, 521-523.

Lydekker, R.—Continued 1887 B

The Cetacea of the Suffolk Crag.

Quart. Jour. Geol. Soc., XLIII, 7-18, pl. ii, 2 text-figs.

—— 1887 C

Note on the Hordwell and other crocodilians.

Geol. Mag. (3), IV, 307-312.

—— 1887 D

Description of a jaw of *Hyotherium* from the Pliocene of India.

Quart. Jour. Geol. Soc., XLIII, 19-22, 1 fig.

—— 1887 E

On certain dinosaurian vertebræ from the Cretaceous of India and the Isle of Wight.

Quart. Jour. Geol. Soc., XLIII, 156-160, 1 fig.

—— 1888 F

Note on the nomenclature of three genera of fossil Mammalia.

Ann. Mag. Nat. Hist. (6), I, 384.

—— 1889 M

Preliminary notice of new fossil Chelonia.

Ann. Mag. Nat. Hist. (6), III, 53-54.

—— 1889 N

Note on a chelonian humerus from the Middle Eocene of Bracklesham.

Proc. Geol. Assoc., XI, 177-179.

—— 1891 A

Catalogue of the fossil birds in the British Museum.

London, i-xxvii+1-368 pages, 75 figs.

Review in Geol. Mag. (3), VIII, 378-381.

—— 1892 C

On zeuglodont and other cetacean remains from the Tertiary of the Caucasus.

Proc. Zool. Soc. Lond., 1892, 558-564, pls. xxxvi-xxxviii.

—— 1893 F

Note on the coracoidal element in adult sloths, with remarks on its homology.

Proc. Zool. Soc. Lond., 1893, 172-174, 3 text-figs.

—— 1894 B

The La Plata Museum.

Nat. Sci., IV, 26-35; 117-128.

—— 1896 C

A hand-book to the Marsupialia and Monotremata.

Lloyd's Natural History Ser. 8vo., i-xvi+1-320 pages, 38 colored plates. The same published in 1894 formed a part of "Allen's Natural History." London.

Notice of in Nat. Sci., V, 135.

Lydekker, R.—Continued 1896 D

A handbook to the Carnivora. Pt. I: Cats, civets and mongooses.

London, i-viii+1-312 pages, pls. i-xxxii. Edited by R. Bowlder Sharpe. Part of "Lloyd's Natural History Series."

—— 1896 E

Recent discoveries in avian palæontology.

Sci. Progress, v, 398-416.

The bibliography presents 36 titles.

—— 1898 C

Recent and fossil rhinoceroses.

Nature, LIX, 87-88.

Review of Osborn, H. F., 1898 I.

—— 1898 D

Wild oxen, sheep and goats of all lands, living and extinct.

4to., London, 1898, i-xv+1-318 pages, 27 pls., 61 text-figs.

—— 1899 A

On the skull of a shark-toothed dolphin from Patagonia.

Proc. Zool. Soc. Lond., 1899, 919-922, 2 figs.

—— 1899 B

The dental formula of the marsupial and placental Carnivora.

Proc. Zool. Soc. Lond., 1899, 922-928, pl. lxii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 140-141.

—— 1901 A

Pterodactyles.

Nature, LXIV, 645-646.

A review of H. G. Seeley's "Dragons of the Air."

—— 1901 B

Armour-clad whales.

Nature, LXIV, 652-653.

An article based on Abel's "Ueber die Hautbepanzerung fossiler Zahnwale."

Abstract in Geol. Centralbl., II, 442.

—— 1901 C

Some animals exterminated during the nineteenth century.

Nature, LXIII, 252-254.

Abstract in Globus, LXXIX, 180-181.

—— 1901 D

Mammoth ivory.

Rep. Smithson. Instn. for 1899, 361-366.

Reprinted from Knowledge, London, in Scient. Amer. Suppl., No. 1228, July 15, 1899.

—— 1902 A

How the sabre-toothed tigers killed their prey.

Nature, LXVI, 357-358.

Refers to W. D. Matthew's paper on the subject.

Lydekker, R.—Continued 1902 B

A text-book of mammals.

Nature, LXVI, 373-375.

A review of Beddard's work on Mammalia, volume X of the Cambridge Natural History.

—— 1903 A

Note on a reindeer skull from Novaia Zemlia.

Proc. Zool. Soc. Lond., 1902, II, 360-362, 1 text-fig.

—— 1903 B

The significance of the callosities on the limbs of the Equidæ.

Proc. Zool. Soc. Lond., 1903, 199-203.

—— 1903 C

Giant land-tortoises.

Knowledge, XXVI (n.s. XVIII), 54-56, 2 illus.

—— 1903 D

The palæontological case for evolution.

Knowledge, XXVI (n.s. XVIII), 73-76; 100-102; 123-126.

—— 1903 E

The ancestry of the elephant.

Knowledge, XXVI (n.s. XVIII), 169-172, 3 figs.

—— 1904 A

The ancestry of the horse.

Knowledge, XXVI (n.s. XVIII), Pan. 1904, 16-19, 4 figs.

—— 1904 B

The ancestry of the camel.

Knowledge, I, 25-28, 5 figs.

—— 1904 C

The ancestry of the Carnivora.

Knowledge, I, 61-64, 5 figs.

—— 1904 D

The later history of the horse.

Knowledge, I, 171-174, 3 figs.

—— 1905 A

Some fossil reptiles.

Knowl. Scient. News (n.s.), II, 304.

—— 1905 B

The Connecticut footprints.

Knowl. Scient. News (n.s.), II, 278.

—— 1905 C

An extinct sea-lion.

Knowl. Scient. News (n.s.), II, 230.

Refers to *Pontolis magnus* True.

—— 1905 D

The lower jaw of mammals.

Knowl. Scient. News (n.s.), II, 230.

—— 1905 E

The Carnegie dinosaur.

Knowl. Scient. News (n.s.), II, 134.

Lydekker, R.—Continued 1905 F
Fossil marmot burrows.
Knowl. Scient. News (n.s.), II, 134.

—— 1906 A
Some rudimentary structures.
Knowl. Scient. News (n.s.), III, 472-475, 4 figs.

—— 1906 B
Weights of whales and dinosaurs.
Knowl. Scient. News (n.s.), III, 391.

—— 1907 A
Guide to the specimens of the horse family (Equidæ) exhibited in the Department of Zoology, British Museum (Natural History), Cromwell Road, London, S.W.
2-42 pages, 26 figs.

—— 1907 B
Guide to the great game animals (Ungulata) in the Department of Zoology, British Museum (Natural History).
i-viii+1-93 pages, 53 figs.

—— 1907 C
A year's progress in vertebrate palæontology.
Sci. Progress, I, 448-464.

—— 1907 D
Marsupial or creodonts?
Nature, LXXV, 498-499.

—— 1907 E
The recently discovered Tertiary Vertebrata of Egypt.
Sci. Progress, I, 668-682.

—— 1908 A
The year's (1907) vertebrate palæontology.
Sci. Progress, II, 501-524.

—— 1908 B
The horned dinosaurs.
Nature, LXXVIII, 544-545, 1 fig.

—— 1909 A
On two Chinese serow-skulls.
Proc. Zool. Soc. Lond., 1908, 940-944, text-figs. 191, 192.

—— 1909 B
Primitive diprotodonts.
Nature, LXXXI, 204.
A review of Gidley, J. W., 1909 A.

—— 1909 C
Vertebrate palæontology in 1908.
Sci. Progress, III, 450-471.

Lydekker, R.—Continued 1909 D
Guide to the whales, porpoises, and dolphins (order Cetacea).
British Museum, 1-47, 33 figs.
Comment on in Ann. Mag. Nat. Hist. (8), IX, 529.

—— 1910 A
Giant tortoises and their distribution.
Sci. Progress, V, 302-317, 1 pl.

—— 1910 B
On a wapiti and a muntjac.
Proc. Zool. Soc. Lond., 1910, II, 987-991, 2 text-figs.
Names *Cervus canadensis wardi* from Thibet.

—— 1910 C
The sheep and its cousins.
London, 8vo., i-xv+1-315 pages, 24 pls., 11 text-figs.

—— 1910 D
Restorations of extinct animals.
Nature, LXXXIV, 459.
A review of Hutchinson's *"Extinct monsters,"* etc.

—— 1910 E
The faunas of northern Asia and America.
Field, CXVI, 352-353.

—— 1910 F
Vertebrate palæontology in 1909.
Sci. Progress, IV, 649-676, illustrations.

—— 1911 A
Vertebrate palæontology in 1910.
Sci. Progress, V, 660-692, 1 pl.

—— 1912 A
The horse and its relatives.
London, Geo. Allen & Co. 8vo., i-xii+1-286 pages, pls. xxiv, 11 text-figs.
Reviewed in Science (n.s.), XXXVII, 413-415.

—— 1912 B
On the milk-dentition of the ratel.
Proc. Zool. Soc. Lond., 1912, I, 221-224, text-figs. 31, 32.

—— 1912 C
Reptiles.
Cunningham's "Reptiles, Amphibia, fishes, and lower Chordata" (Vol. 3 of "Pycraft's Animal life; an evolutionary natural history"), 1-156, pls. i-xii, text-figs. 1-12.

—— 1912 D
The ox and its kindred.
8vo., London, i-xi+1-271 pages, 55 ills.
Abstract in Nature, LXXXIX, 524.

Lydekker, R.—Continued 1913 A

Vertebrate palæontology in 1912.

Sci. Progress, VIII, No. 20, 1-24.

—— 1913 B

Catalogue of the ungulate mammals in the British Museum (Natural History).

Vol. I, i-xvii+1-249 pages, 55 figs. Artiodactyla, Fam. Bovidæ.

—— 1914 A

Vertebrate palæontology in 1913.

Sci. Progress, VIII, No. 32, 626-653, 6 figs.

—— 1914 B

Catalogue of the ungulate mammals in the British Museum (Natural History).

Vol. III, i-xvi+1-283 pages, 50 figs. Artiodactyla, Fam. Bovidæ, Antilocapridæ, Giraffidæ.

—— 1915 A

The true coracoid.

Proc. Zool. Soc. Lond., 1915, 235-237, 2 text-figs.

—— 1915 B

Recent work in vertebrate palæontology.

Nature, XCV, 276-277.

—— 1915 C

Vertebrate palæontology in 1914.

Sci. Progress, IX, 613-638.

—— 1915 D

Catalogue of the ungulate mammals in the British Museum (Natural History).

Vol. IV, i-xxi+1-438 pages, 56 figs. Artiodactyla, Fam. Cervidæ, Tragulidæ, Camelidæ, Suidæ, Hippopotamidæ.

—— 1916 A

Catalogue of the ungulate mammals in the British Museum (Natural History).

Vol. V, i-xlv+1-207 pages, portrait, 31 figs. Perissodactyla, Hyracoidea, Proboscidea.

—— See also **Thomas** and **Lydekker.**

Lyell, C. 1843 C

See Hay, O. P., 1902 A, 149; also in Neues Jahrb. Min. Geogn. Geol. Pal., 1844, 221-222; Lond. Edinb. Philos. Mag., XXXIII, 1843, 515-518.

—— 1843 D

Recession of the Falls of Niagara.

Proc. Geol. Soc. Lond., IV, 19-22.

—— 1844 A

Notes on the Cretaceous strata of New Jersey and other parts of the United States bordering on the Atlantic.

Proc. Geol. Soc. Lond., IV, 301-306.

Lyell, C.—Continued 1845 A

See Hay, O. P., 1902 A, 150. Reprinted in Proc. Geol. Soc. Lond., IV, 547-563, 2 figs.

—— 1845 B

Travels in North America, with geological observations in the United States, Canada, and Nova Scotia.

Two volumes, London, John Murray, 1845 8vo., vol. I, i-xvi+1-316 pages; vol. II, i-viii+1-272 pages. Both volumns illustrated with maps and figures.

Abstract in Quart. Jour. Geol. Soc., I, 389-399.

—— 1845 C

On the Miocene Tertiary strata of Maryland, Virginia, and of North and South Carolina.

Proc. Geol. Soc. Lond., IV, 547-561.

This contains the same matter as Lyell, C., 1845 A.

—— 1847 A

See Hay, O. P., 1902 A, 150. Abstract in Neues Jahrb. Min. Geogn. Geol., 1848, 107.

—— 1847 B

See **Hay,** O. P., 1902 A. [On remains of vertebrates found in North America.]

—— 1847 C

Quart. Jour. Geol. Soc., III, lxxxi.

—— 1855 A

Second visit to the United States of North America.

In two volumns. Third ed. London, John Murray, 1855, 8vo., vol. I, i-xii+1-368 pages; vol. II, i-xii+1-385 pages.

The first edition was published in 1849: the second in 1850.

Lyman, Benjamin Smith 1894 A

Some New Red horizons.

Proc. Amer. Philos. Soc., XXXIII, 192-215, 2 maps.

Presents lists of fossils found at numerous localities in the New Red of Massachusetts, Connecticut, New Jersey, Pennsylvania, Virginia and North Carolina.

Lyon, Marcus W. 1901 A

A comparison of the osteology of the jerboas and jumping mice.

Proc. U. S. Nat. Mus., XXXIII, 659-668, pls. xxv-xxvii.

—— 1904 A

Classification of the hares and their allies.

Smithson. Misc. Coll., XLV, 321-447, pls. lxxiv-c.

Deals much with the osteology.

Lyon, Marcus W.—Continued 1904 B

The results of a study of the existing hares, rabbits and pikas.

Science (n.s.), XIX, 701.

—— 1908 A

Remarks on the horns and on the systematic position of the American antelope.

Proc. U. S. Nat. Mus., XXXIV, 393-401, pls. xxxviii, xxxix.

Abstract in Nature, LXXVIII, 610.

—— 1908 B

Remarks on the horns and the systematic position of the American antelope.

Science (n.s.), XXVII, 693.

—— 1925 A

A specimen of the extinct musk-ox, *Symbos cavifrons* (Leidy), from North Liberty, Indiana.

Proc. Indiana Acad. Sci., XXXV, 321-324, 1 fig.

Lytle, J. W. 1926 A

The Rancho La Brea asphalt pits.

Mus. Graphic, I, 23-24, 1 fig.

McAdams, William 1883 A

Collections of fossils from the drift of the valleys of the Illinois and Mississippi rivers.

Trans. Acad. Sci. St. Louis, IV, lxxix-lxxxi.

—— 1884 B

Animal remains from the loess and glacial clays [at Alton, Ill.].

Proc. Amer. Assoc. Adv. Sci., XXXII, 1883, Minneapolis, 268-269.

—— 1887 A

Records of ancient races in the Mississippi valley.

St. Louis, C. R. Barnes Pub. Co., 8vo, i-vi+1-120 pages, with many woodcuts.

On page 35 the author refers to the extreme rarity of bison bones in the mounds and about the dwelling places of the Indians.

MacBride, E. W. 1910 A

Origin of vertebrates.

Proc. Linn Soc. Lond., CXXII, 15-20.

—— 1920 A

Discussion on the zoological position and affinities of *Tarsius*.

Proc. Zool. Soc. Lond., 1919 (1920), 497-498.

M'Caslin, David S. 1883 A

Geology of Jay County [Indiana].

Geol. Surv. Ind., XII, 153-176.

Macloskie, George 1884 A

Natural history of mammals. Proboscidea.

Stand. Nat. Hist., V, 215-228, figs.

McClung, C. E. 1905 A

The fossil bison of Kansas.

Trans. Kansas Acad. Sci., XIX, 157-159, fig. 10.

Describes *Bison kansensis* sp. nov.

—— 1906 A

The University of Kansas expedition into the John Day region of Oregon.

Trans. Kansas Acad. Sci., XX, 67-70.

—— 1908 A

Restoration of the skeleton of *Bison occidentalis*.

Kansas Univ. Sci. Bull., IV, 249-252 pl. xiv.

Abstract in Geol. Centralbl., XIII, 203.

—— 1908 B

Ichthyological notes on the Kansas Cretaceous.

Kansas Univ. Sci. Bull., IV, 235-246, pls. x-xiii, 10 text-figs.

Abstracts in Geol. Centralbl., XIII, 439; Rev. crit. Paléozool., XIII, 156; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 158.

M'Clure, Frank 1904 A

A great mammoth's tooth.

Scient. Amer., XC, 60, fig.

Tooth of *Elephas columbi*, Amboy, Ohio.

McConnell, R. G. 1893 A

Report on a portion of the district of Athabasca, etc.

Rep. Geol. Surv. Canada, V, pt. 1, D, 1-67.

—— 1901 A

Skull of extinct bison.

Summ. Rep. Geol. Surv. Canada for 1900, 185.

A brief note on finding of skull in Klondike district.

—— 1905 A

Report on the Klondike gold fields.

Rep. Geol. Surv. Canada (n.s.), XIV, pt. B, 1-71.

McCornack, Ellen Condon 1914 A

A study of Oregon Pleistocene.

Bull. Univ. Oregon (n.s.), XII, No. 2, 1-16.

Contains account of finding of *Desmostylus hesperus* in Miocene; with figure; also a list of Pleistocene fossils found in Oregon and southern Washington.

—— 1920 A

Contributions to the Pleistocene history of Oregon.

Univ. Oregon; Leaflet series, VI, No. 3, pt. 2, 1-23, 2 maps.

McCourt, Walter Edward 1917 A
The geology of Jackson County [Missouri].
Missouri Bur. Geol. Mines (2), XIV, i-x; 1-158, pls. i-xix.

M'Coy, F. 1849 A
Reply to Prof. Owen's letter on the ganoine of some fish-teeth.
Ann. Mag. Nat. Hist. (2), VII, 140-141.

—— 1853 C
On the supposed fish remains figured on plate 4 of the Silurian System.
Quart Jour. Geol. Soc., IX, 12-15.

MacCurdy, George Grant 1916 A
Archæological evidences of man's antiquity at Vero, Florida.
Jour. Geol., XXV, 56-62, 6 text-figs.
Reprints of this paper were distributed a few days before Jan. 1, 1917.

—— 1917 A
The problem of man's antiquity at Vero, Florida.
Amer. Anthrop. (n.s.), XIX, 252-261, figs. 45-52.

MacCurdy, H. M. 1920 A
Mastodon remains found in Gratiot County, Michigan.
Rep. Mich. Acad. Sci., XXI, 109-110.

Macdonald, William 1839 A
On the osseous structure of fishes.
Ann. Nat. Hist. II, 69-70.

—— 1841 A
On the structure of fishes, so far as the analogies can be traced between the limbs of the mammals and the fins of fishes.
Rep. Brit. Assoc. Adv. Sci., X, pt. 2, 131-133.

—— 1863 A
On the vertebroid homologies of the cranium in Vertebralia or Osteozoa.
Proc. Roy. Phys. Soc. Edinb., III, 49-64, table.

—— 1871 A
On the homologies of the vertebral skeleton in osseous fishes and man.
Proc. Roy. Soc. Edinb., VII, 472-474.

M'Donnell, Robert 1864 A
On the system of the "lateral line" in fishes.
Trans. Roy. Irish Acad., XXIV, 161-187, pls. iv-vii.

McGee, W J 1888 A
Paleolithic man in America.
Pop. Sci. Month., XXXIV, 20-36, 7 text-figs.

McGee, W J—Continued 1889 A
An obsidian implement from Pleistocene deposits in Nevada.
Amer. Anthrop., II, 301-312, 1 text-fig.

—— 1891 A
The Pleistocene history of northeastern Iowa.
Rep. U. S. Geol. Surv. (J. W. Powell), XI, pt. i, 189-583, pls. ii-lxi, 120 text-figs.

—— 1891 B
The Lafayette formation.
Rep. U. S. Geol. Surv., XII, pt. 1, 347-521, pls. xxxii-xli, text-figs. 28-72.

—— 1902 A
The New Madrid earthquake.
Amer. Geologist, XXX, 200-201.

McGregor, James Howard 1901 A
Characters and relationships of the belodont reptiles.
Science (n.s.), XIII, 272.

—— 1901 B
Development of the skull in *Ceratodus.*
Ann. N. Y. Acad. Sci., XIII, 447.
Abstract in Anat. Hefte. Ergebn., XIV, 1085.

—— 1902 A
The ancestry of the Ichthyosauria.
Science (n.s.), XVI, 27.
See also Ann. N. Y. Acad. Sci., XV, 1902, 55.

—— 1904 A
The relationships of the Phytosauria.
Science (n.s.), XIX, 254-255.

—— 1905 A
Derivation of Ichthyosauria.
Science (n.s.), XXI, 295.

—— 1906 A
The Phytosauria, with especial reference to *Mystriosuchus* and *Rhytidodon.*
Mem. Amer. Mus. Nat. Hist., IX, 29-101, pls. vi-xi, text-figs. 1-26.
Appended is a bibliography of 76 titles.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 445-446; Geol. Centralbl., XI, 475; Sci. Progress, I, 458; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 162.

McInnes, William 1913 A
The basins of Nelson and Churchill Rivers.
Can. Geol. Surv. Mem., XXX, 1-146, maps and figs.

McIntosh, —— 1911 A
A brief sketch of the toothed whales (Odontoceti).
Zoologist (4), XV, 81-103.

McIntosh—Continued 1917 A
On the skeleton of an adult female small finner, or piked whale (*Balænoptera acutorostrata* Lacépède).
Jour. Zool. Res., II, 37-73, pls. i-v.

Mackel, F. 1809 A
Tabellen i-iv of Froriep and Meckel's "Vorlesungen über vergleichende Anatomie von G. Cuvier, gesammelt und unter seinen Augen herausgegeben von C. Duméril," Erster Theil.

Mackensen, Bernard 1905 A
Report on the excavation of mastodon remains, undertaken by a committee of the Society of Antonio.
Bull. Sci. Soc. S. Antonio, I, No. 1, 3-10, pls. i-iv, and sketch of locality.

Mackenzie, William 1911 A
Some observations on the comparative anatomy of the fibula.
Proc. Roy. Soc. Victoria (n.s.), XXIII, 358-367, pls. lxxvi-lxxviii.

Mackie, S. J. 1863 C
A classified and stratigraphical list of fossil birds.
Geologist, VI, 106-109.

—— 1863 D
A classified and stratigraphical list of fossil Mammalia.
Geologist, VI, 332-347.

—— 1863 E
Fossil birds.
Geologist, VI, 415-424; 445-455, pls. xxii-xxiii.
Treats of fossil birds in history.

—— 1863 F
Review of J. W. Dawson's "Air-breathers of the Coal period."
Geologist, VI, 434-440.

—— 1863 G
Miscellaneous notices.
Geologist, VI, 475-478.
Notes naming of *Euelephas jacksoni* by E. Billings.

Mackintosh, N. A. 1923 A
The chondrocranium of the teleostean fish *Sebastes marinus*.
Proc. Zool. Soc. Lond., 1923, 501-513, 9 figs.
The bibliography includes 15 titles.

McLellan, M. E. See **Hanna** and **McLellan.**

McLenahan, S. 1852 A
[Letter addressed to Prof. E. G. Emmons.]
Geol. Surv. N. Carolina, Emmons' Rep., 168-173.

McMurrich, J. Playfair 1883 A
On the osteology and development of *Syngnathus peckianus* (Storer).
Quart. Jour. Micr. Sci. (n.s.), XXIII, 623-650, pls. xlii, xliii.

—— 1901 A
The fifth International Zoological Congress, Berlin.
Science (n.s.), XIV, 405-407.
A brief report of the proceedings.

—— 1910 A
The life history of the Pacific salmon.
Trans. Canad. Inst. IX, 23-44, 3 figs.

—— 1812 A
The problem of the vertebrate head in the light of comparative anatomy.
Proc. Internat. Zool. Congr., VII, Boston, 1907, 167-176.

—— 1913 A
The life cycles of the Pacific coast salmon belonging to the genus *Oncorhyncus*, as revealed by their scale and otolith markings.
Trans. Roy. Soc. Canada (3), VI, sec. iv, 9-28, pls. i-x, 8 text-figs.

Maddren, Alfred G. 1905 A
Smithsonian exploration in Alaska in 1904, in search of mammoth and other fossil remains.
Smithson. Misc. Coll., XLIX, 1-117, map, 3 text-figs.

—— 1905 B
Notes on the occurrence of mammoth remains in Alaska.
Science (n.s.), XXI, 746.

Madison, J. (Bishop) 1805 A
Observations on the mammoth, or American elephant.
Phila. Med. and Phys. Jour., II, pt. i, 58-60.
Followed by a note by Dr. B. S. Barton.

—— 1806 A
The mammoth, or American elephant.
Med. Phys. Jour. Lond., XV, 486.

—— 1812 A
An abstract of his memoir on elephantine bones discovered in Virginia during 1811.
Med. Reposit. Phila (hex. 3), III, 338-390.

Madsen, Victor 1904 A
On Jurassic fossils from East-Greenland.
Meddelelser om Grönland, XXIX, pt. 6, 157-208, pls. vi-vii.
Mentions (p. 169) the finding of a dinosaurian foot-print and (p. 170) of a vertebra of *Ichthyosaurus* (*Ophthalmosaurus*).

Magitot, E. 1875 A

Contribution à l'histoire des anomolies du système dentaire chez les mammifères. De l'anomolie de nombre.

Jour. Anat. Physiol. Paris, xi, 46-82.

Magnan, A. 1922 A

Les caractéristiques des oiseaux suivant le mode de vol.

Ann. Sci. nat. (10), v, 125-334, 14 pls.

Pages 327-330 are occupied by the bibliographical index.

Not all of the genera of this extensive work are cited in this Bibliography and Catalogue.

Magnus, Hugo 1871 A

Untersuchungen über den Bau des knöchernen Vogelkopfes.

Zeitschr. wiss. Zool., xxi, 1-108, pls. i-vi.

Mahn, Robert 1890 A

Bau und Entwicklung der Molaren bei *Mus* und *Arvicola.*

Morphol. Jahrb., xvi, 652-685, pl. xxv.

Major, C. J. Forsyth 1872 A

Note on some fossil monkeys found in Italy, preceded by a review of the fossil Quadrumana in general.

Ann. Mag. Nat. Hist. (4), x, 153-166.

—— 1891 A

On the fossil remains of the family Giraffidæ.

Proc. Zool. Soc. Lond., 1891, 315-326, 4 figs.

—— 1891 B

Notes on some ungulate mammals.

Proc Zool. Soc. Lond., 1891, 384-389.

—— 1897 A

On the change and form of the teeth in the Centetidæ, a Malagasy family of Insectivora.

Ann. Mag. Nat. Hist. (6), xx, 525-544.

The bibliography is in foot-notes.

—— 1899 B

Note on a table of contemporary geological deposits arranged stratigraphically, with their characteristic genera of mammals.

Geol. Mag. (4), vi, 60-69.

—— 1901 A

On some characters of the skull of the lemurs and monkeys.

Proc. Zool. Soc. Lond., 1901, i, 129-152, pls. xi, xii, 20 text-figs.

—— 1901 B

On the evidence of the transference of secondary sexual characters of mammals from males to females.

Geol. Mag. (4), viii, 241-245.

Major, C. J. Forsyth—Cont'd 1908 A

On species of *Castor,* fossil and recent.

Proc. Zool. Soc. Lond., 1908, ii, 630-634, text-figs. 132-137.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 70.

—— 1908 B

Jaw of Canadian beaver, with five lower cheek-teeth.

Proc. Zool. Soc. Lond., 1908, 630, fig.

Makowsky, Alexander 1876 A

Über einen neuen Labyrinthodonten: "*Archegosaurus austriacus* nov. spec."

Sitz.-Ber. Akad. Wiss. Wien, lxxiii, Abth. i, 155-166.

Malaquin, Alphonse G. 1900 A

Le *Coryphodon gosseleti* (n. sp.) et la faune de l'Eocène inférieur (Landénien-Thanétien) de Vertain.

Ann. Soc. Géol. Nord, xxviii, 257-270, pl. iii.

Malbranc, M. 1875 A

Von der Seitenlinie und ihren Sinnesorganen bei Amphibien.

Zeitschr. wiss. Zool., xxvi, 24-86, pls. i-iv.

Mandl, Louis 1839 A

Researches on the structure of the scales of fishes. See Hay, O. P., 1902 A, 152.

Reprinted in Edinb. New Philos. Jour., xxviii, 113-126; 274-287, pl. iii; Froriep's Neue Notizen, xiii, 225-234; 241-248; 262-265.

Abstract in Compt. Rend. Acad. Sci. Paris, viii, 1021-1022; Ann. Nat. Hist., iii, 463; Rev. Zool., 1839, 191.

—— 1840 A

Sur la structure des écailles des poissons.

C. R. Acad. Sci. Paris, x, 338-339.

Also in Ann. Sci. nat. (2), xiii, 1840, 62-63.

Manigault, G. E. 1886 A

Discovery of two unusual fossils.

Proc. Elliott Soc. Nat. Hist., 1886, 91-92.

Reports finding of phalanx of *Megalonyx* and of a sirenian jaw afterwards called *Dioplotherium manigaultii.*

—— 1887 A

On the probable source of the phosphorus in the South Carolina phosphates.

Proc. Elliott Soc. Nat. Hist., 1887, 128-132, pl. i.

Manigault, G. E.—Continued 1888 A

Fossil molar tooth of *Dorudon serratum*.

Proc. Elliott Soc. Nat. Hist., 1888, 187.

Manners-Smith, T. 1908 A

A study of the cuboid and os peroneum in the primate foot.

Jour. Anat. Physiol. Lond., XLII, 397-414, 23 figs.

Mannu, Andrea 1923 A

Foramina frontalia perforantia und fissura bregmatica lateralis bei Equiden.

Anat. Anz., LVII, 161-178, 5 figs.

There are 16 titles in the bibliography.

Mansion, Arthur. 1904 A

Les soricidés.

Rev. Scient. Paris (5), I, 169-173.

Mansuy, —— 1923 A

Reptiles et mammifères. (Abstracts of papers.)

Rev. Géol. et Sci. conn., IV, 1893, 90-126.

Mantell, Gideon Algernon 1834 A

Note sur la découverte des ossemens fossiles dans la formation de glauconie sableuse (Lower greensand).

Ann. Sci. nat. Paris. (2), II, 63-64.

—— 1839 A

The wonders of geology.

New Haven, Conn., and London. 8vo., vols. I, II, i-xvi+1-821 pages, pls. i-v, 155 text-figs.

—— 1844 A

The medals of creation: or first lessons in geology and in the study of organic remains.

London, 8vo., II, 587-876, pl. vi, text-figs. 125-157.

—— 1848 C

[On *Basilosaurus*.]

Illustrated London News, November 4, 1848.

Reprinted in Hutchinson, H. N., 1910 A, 298-299.

—— 1848 D

On the structure of the jaws and teeth of the *Iguanodon*.

Ann. Mag. Nat. Hist., II, 51-52.

Abstract in Neues Jahrb. Min. Geol. Pal., 1849, 494-495.

—— 1850 A

A pictorial atlas of fossil remains.

London, 1850, 4to., 1-207 pages, 76 pls.

Marchlewski, M. T. 1924 A

Über quartäre Pferde aus Böhmen und Polen.

Bull. internat. Acad. Sci. Cracovie, 1924 (1925), 501-514, 3 figs.

Marchlewski, M. T.—Cont'd 1926 A

Possible significance of certain cranial features in cattle.

Bull. internat. Acad Sci. Cracovie, 1926, 95-105.

The bibliography embraces 22 titles.

Marck, W. 1885 A

Fische der oberen Kreide Westfalens.

Palæontogr., XXXI, 232-267, pls. xxi-xxv.

Abstract in Corresp. Bl. Naturh. Ver. Rheinl., XLII, 58-60.

Marcus, Harry 1921 A

Über die Zahl und die Verschiebung von Zähnen besonders bei *Manatus*.

Arch. Entwickl.-mech. Organ., XLVII, 571-586, pls. xviii, xix, 3 text-figs.

The bibliography presents 15 titles.

Marinelli, W. 1924 A

Untersuchungen über die Function des Gebisses der Entelodontiden.

Palæont. Zeitschr., VI, 25-41, 5 text-figs.

—— 1925 A

Remarks in discussion of the Astrolepidæ.

Palæont. Zeitschr., VII, 169-170.

McIlhenney, Edward A. 1913 A

The wild turkey and its hunting.

The Illustrated Outdoor World and Recreation, New York, XLVIII, 1-9, 3 figs. (Dec. 1912); 146-147, 206-208 (1913). See Shufeldt, R. W., 1913 H.

Marsh, O. C. 1872 U

Remarks on explorations in the Rocky Mountains, Oregon, etc.

Proc. Calif. Acad. Sci. (1), IV, 200.

—— 1874 A

See Hay, O. P., 1902 A, p. 155.

Abstract in Jour. Zool. Paris, III, 1874, 61-62.

—— 1874 E

Fossil horses in America.

Amer. Naturalist, VIII, 288-294, figs. 73-75.

—— 1876 I

See Hay, O. P., 1902 A, 156.

Abstract in Arch. Sci. Phys. Nat., LIX, 1877, 126-127.

—— 1878 A

New species of *Ceratodus* from the Jurassic.

Amer. Jour. Sci. (3), XV, 76.

Reprinted in Ann. Mag. Nat. Hist. (5), I, 1878; 184. See also Pop. Sci. Review (n.s.), II, 210; Sci. Gossip, XIV, 117.

—— 1889 C

See Hay, O. P., 1902 A, 160.

Abstract in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 434.

Marsh, O. C.—Continued 1889 E

See Hay, O. P., 1902 A, 160.

Abstract in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 435.

—— 1894 A

Reprint in Geol. Mag. (4), I, 193-195, pl. vi.

—— 1894 B

Reprint in Geol. Mag. (4), I, 294-295, pl. x.

—— 1894 D

Reprint in Scient. Amer. Suppl., No. 969, July 28, 1894, 15491-15492, figs.

—— 1895 C

On the affinities and classification of the dinosaurian reptiles.

Amer. Jour. Sci. (3), L, 483-498, pl. x.

Abstract of paper read before International Congress of Zoologists, Leyden, 1895. See also Marsh, O. C., 1896 D; Marsh, O. C., 1896 A.

Abstract in Geol. Mag. (4), III, 388-400, figs. 1-12.

—— 1896 A

Restoration of some European dinosaurs, with suggestions as to their place among the Reptilia.

Geol. Mag. (4), III, 1-9, pls. i-iv. See also Marsh, O. C., 1895 B.

—— 1896 C

The dinosaurs of North America.

Review in Jour. Geol., V, 87-88.

Abstract in Geol. Mag. (4), IV, 38-44.

—— 1897 A

Reprint in Geol. Mag. (4), V, 38-39.

—— 1897 D

Reprint in Geol. Mag. (4), IV, 433-439, pl. xix, 2 text-figs.

—— 1897 E

Recent observations on European dinosaurs.

Amer. Jour. Sci. (4), IV, 413-416. See Geol. Mag. (4), V, 6-9.

—— 1898 B

Reprint in Geol. Mag. (4), VI, 13-16.

—— 1899 C

The origin of mammals.

Proc. internat. zool. Congr., IV, Cambridge, 1898, 71-75.

Martin, Bertha 1916 A

Tooth development in *Dasypus novemcinctus*.

Jour. Morphol., XXVII, 647-682, pls. i-iv, text-figs. 1-15.

There is a bibliography of 23 titles.

Martin, D. S. 1885 A

Mastodon at Ridgewood, Long Island, N. Y.

Trans. N. Y. Acad. Sci., V, 15.

Brief statement only.

Martin, Edward A. 1905 A

The age of *Diplodocus*.

Knowl. Scient. News (n.s.), II, 159.

Martin, Handel T. 1907 A

Giant fighting fish of a vanished sea.

Discovery, New York, I, 128, fig.

—— 1912 A

On a comparison of three skulls: *Castoroides ohioensis, Castoroides kansensis*, and *Castor*.

Kansas Univ. Sci. Bull., VI, 389-396, pls. xxiv-xxvii.

—— 1913 A

Notice of a new fish from the Permian of Kansas, with description.

Kansas Univ. Sci. Bull., VII, 185-186.

—— 1922 A

Anguillavus hackberryensis. A new species and a new genus of fish from the Niobrara Cretaceous of Kansas.

Kansas Univ. Sci. Bull., XIII, 95-97, pl. vi. This number of the Bulletin is dated May, 1920. The paper is said to have been received for publication May 18, 1921. It was received at the U. S. Nat. Museum 1922.

Review in Rev. crit. Paléozool., XXVII, 86.

—— 1922 B

Indications of a gigantic amphibian in the Coal Measures of Kansas.

Kansas Univ. Bull., XIII, 103-114, pls. i-iii.

Reviewed in Pan-Amer. Geologist, XLII, 236; Rev. crit. Paléozool., XXVII, 207.

—— 1922 C

Discovery of gigantic footprints in the Coal Measures of Kansas.

Science (n.s.), LV, 99-100.

—— 1924 A

A new bison from the Pleistocene of Kansas, with notice of a new locality for *Bison occidentalis*.

Kansas Univ. Sci. Bull., XV, 273-278, pls. xxvi, xxvii.

Martin, Horace T. 1892 A

Castorologia; or the history and traditions of the Canadian beaver.

Montreal and London, 8vo., i-xvi+1-238 pages, 54 illustrations.

Martin, Rudolph 1906 A

Revision der obereocaenen und unteroligocaenen Creodonten Europas.

Rev. suisse Zool., XIV, 405-600, pls. xvi-xix.

Martin, W. 1835 A
Note on the mode of attachment of the os furcatum to the sternum in the pelican, adjutant, crane, and heron.
Proc. Zool. Soc. Lond., 1835, 155-156.

Martins, Charles 1857 A
Nouvelle comparaison des membres pelviens et thoraciques chez l'homme et chez les mammifères déduite de la torsion de l'humerus.
Ann. Sci. nat. (4), VIII, 45-110, pls. ii, iii.
An extensive bibliography of the subject is found in foot notes.

—— 1872 A
De la position normale et originèlle de la main chez l'homme et dans la série des vertébrés.
C. R. Acad. Sci. Paris, LXXIV, 307-309.

Mason, S. C. 1883 A
A preliminary list of fossils found in Riley County [Kansas].
Trans. Kansas Acad. Sci., VIII, 12-13.

Masterman, Arthur T. 1894 A
On the skeleton of the tunny.
Rep. Fish. Board Scotland, XII, 272-283, pls. xi, xii.

—— 1913 A
Report on the investigations upon the salmon, with special reference to age determination by study of the scales.
Fisheries Investigations (London), (1), I, 1-111, pls. i-iv, numerous figures.
On pages 64-65 are found references to the literature of the subject.

—— 1913 B
Report on investigations upon the smelt (*Osmerus eperlanus*) with special reference to age determination by study of scales and its bearing upon sexual maturity.
Fisheries Investigations (London) (1), I, 113-126, pls. i, ii.

Mather, Cotton 1714 A
An account of several observations made in New England, in 1712.
Phil. Trans. Roy. Soc. Lond., XXIX, 62-63.
Referred to by Warren in his *Mastodon giganteus*, ed. 2, 195-196. See Dudley, J., 1847 A.

Mather, W. W. 1834 A
Mittheilungen an Professor Bronn gerichtet.
Neues Jahrb. Min. Geogn. Geol., 1834, 531-532.

Mather, W. W.—Continued 1843 A
Bones of animals in alluvial depositions.
Geol. Surv. New York, pt. i, 44-47.

—— 1843 B
Mastodon.
Geol. Surv. New York, IV, pt. 1, 232-233, 636.

Matschie, P. 1896 A
Geographische Fragen aus der Säugetierkunde.
Verh. Ges. Erdkunde, Berlin, XXIII, 247-256, pl. i.

—— 1898 A
Ueber die systematische Stellung von *Budorcas* Hodgs.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1898, 30-31.

—— 1899 A
Ueber die Verbreitung der Hirsche.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1899, 130-139.

—— 1901 A
Zoogeographische Betrachtungen über die Säugethiere der nördlichen Alten Welt.
Arch. Naturges., LXVII, Bd. i, 307-328, pl. x.

—— 1907 A
Zwei anscheinend noch nicht beschriebene Arten des Bibers.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1907, 215-220.

—— 1907 B
Die wissenschaftliche Bezeichnung der sogenannten Altai-Hirsche.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1907, 221-228, 7 text-figs.

—— 1913 A
Eine neue Form des Elenantilope.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1913, 249-258.

—— 1918 A
Sechs neue Arten der Gattung *Gulo*.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1918, 141-155, pls. i-v, 7 text-figs.

Matson, George Charlton 1915 A
The phosphate deposits of Florida.
Bull. U. S. Geol. Surv., DCIV, 1-101, pls. i-xvii, 2 text-figs.
Abstract in Jour Wash. Acad. Sci., V, 648.

——, and F. G. **Clapp** 1909 A
A preliminary report of the geology of Florida, with special reference to the stratigraphy.
Rep. Florida Geol. Surv., II, 25-173, pls. i-viii, 2 text-figs.

Matson, George Charlton, and Samuel **Sanford** 1913 A

Geology and ground waters of Florida.

U. S. Geol. Surv. Water-supp. Pap., CCCXIX, 1-445, pls. i-xvii, figs. 1-7.

Matsumoto, Hikoshichirô 1918 A

On a new fossil *Trionyx* from Hokkaido.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), III, 57-60, pl. xxi.

Describes *Trionyx desmostyli.*

Abstract in Geol. Zentralbl., XXV, 467.

—— 1918 B

A contribution to the morphology, palæobotany, and systematic of *Desmostylus.*

Sci. Rep. Tohoku Imp. Univ. (ser. 2, Geol.), III, 61-74, pls. xxii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 400.

—— 1918 C

On a new archetypal fossil cervid from the Prov. of Mino.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), III, 75-81, pl. xxiii, 1 text-fig.

—— 1918 D

On some fossil bisontines of eastern Asia.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), III, 83-102, pls. xxiv-xxxiv, 3 text-figs.

Abstracts in Rev. crit. Paléozool., XXIV, 143; Geol. Zentralbl., XXV, 466.

—— 1921 A

Descriptions of some new fossil mammals from Kani District, Prov. of Mino, with revisions of some Asiatic fossil rhinocerotids.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), V, 75-91, pls. xii-xiv.

Abstract in Nature, CVIII, 482.

—— 1923 A

A contribution to the knowledge of *Mœritherium.*

Bull. Amer. Mus. Nat. Hist., XLVIII, 97-140, 11 figs.

—— 1924 A

A revision of *Palæomastodon,* dividing it into two genera, and with descriptions of two new species.

Bull. Amer. Mus. Nat. Hist., L, 1-58, 48 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, 295-296.

—— 1926 A

On two species of fossil Pinnipedia from Kazusa and Saghalin.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, No. 1, 13-16, pls. vi, vii.

Matsumoto, H.—Continued 1926 B

On some fossil cetaceans of Japan.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, No. 1, 17-27, pls. viii-x, 5 text-figs.

—— 1926 C

On some new fossil cervicorns from Kazusa and Liukiu.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), No. 2, X, 17-25, pl. xi (i).

—— 1926 D

On some fossil cervids from Shantung, China.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, No. 2, 27-37, pls. xii-xv (i-iv).

—— 1926 E

On a new fossil race of big-horn sheep from Shantung, China.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, No. 2, 39-41, pls. xvi-xvii (i-ii).

—— 1926 F

On the archetypal mammoths from the province of Kazusa.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, No. 2, 43-50, pls. xviii-xxiv (i-vii).

—— 1927 A

On *Bison exguus* and its ancestry.

Sci. Rep. Tohoku Imp. Univ. (2, Geol.), X, 51-55, pls. xxv, xxvi.

Matthes, Ernst 1912 A

Einige Bemerkungen über das Gehörgan von Walen und Sirenen.

Anat. Anz., XLI, 594-599.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 88.

—— 1912 B

Zur Entwicklung des Kopfskelettes der Sirenen. I: Die Regio ethmoidalis des Primordialkraniums von *Manatus latirostris.*

Jena. Zeitschr. Naturwiss., XLVIII, 489-514, 8 text-figs.

On pages 511-512 is a bibliography of the subject.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 86-88.

—— 1915 A

Beiträge zur Anatomie und Entwicklungsgeschichte der Sirenen. 1: Die äussere Körperform eines Embryos von *Halicore dugong* von 15 cm. Rückenlänge.

Jena. Zeitschr. Naturwiss., LIII, 557-580, pls. i-viii.

Page 579 is occupied by a list of the works consulted.

Matthes, Ernst—Continued 1921 A

Eine bemerkenswerte Eigentümlichkeit am meckel'schen Knorpel eines Säugethieres. Zusamensetzung des meckel'schen Knorpels bei *Halicore dugong* aus zwei hintereinander Teilstücken.

Anat. Anz., LIV, 209-229, 6 figs.
There is a bibliography of 29 titles.

—— 1921 B

Zur Kenntniss des Knorpelschädels von *Halicore dugong*.

Zool. Anz., LII, 139-151, 2 figs.
The bibliography contains 12 titles.

—— 1921 C

Zur Entwicklung des Kopfskelettes der Sirenen. II: Das Primordialcranium von *Halicore dugong*.

Zeitschr. Anat. Entwicklungsges. Abt. I, LX, 1-304, pls. i-vi, 36 text-figs.
There is furnished a bibliography of 103 titles.

Matthew, George F. 1879 A

Report on the superficial geology of southern New Brunswick.

Rep. Geol. Surv. Canada. Rep. Progress for 1877-1878, X, 1-36.

—— 1903 A

Note in reference to batrachian footprints.

Bull. Nat. Hist. Soc. N. Brunsw., V, 102.

—— 1903 B

On batrachian and other footprints from the Coal Measures of Joggins, N. S.

Bull. Nat. Hist. Soc. N. Brunsw., V, 103-108, pl. ii.
Abstract in Geol. Mag. (n.s.), X, 1903, 327.

—— 1903 C

New genera of batrachian footprints of the Carboniferous system in eastern Canada.

Canad. Rec. Sci., IX, 99-111, 1 plate.
For brief abstract see Neues Jahrb. Min. Geol. Pal., 1905, I, 339.

—— 1903 D

An attempt to classify Palæozoic batrachian footprints.

Trans. Roy. Soc. Canada (2), IX, sec. iv, 109-116, pls. i-iii.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 339; Geol. Centralbl., IX, 661; Rev. crit. Paléozool., IX, 128.

Matthew, George F.—Continued 1904 A

New species and a new genus of batrachian footprints of the Carboniferous system in eastern Canada.

Trans. Roy. Soc. Canada (2), X, sec. iv, 77-122, pls. i-vi.
Abstracts in Geol. Centralbl., VI, 716; Rev. crit. Paléozool., IX, 128-129.

—— 1904 B

Note on the genus *Hylopus* of Dawson.

Bull. Nat. Hist. Soc. N. Brunsw., V, 247-252, 1 text-fig.
Abstract in Geol. Centralbl., XII, 599.

—— 1907 A

A new genus and a new species of Silurian fish.

Trans. Roy. Soc. Canada (3), I, sec. iv, 7-9, 1 plate.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 158.

—— 1910 A

Remarkable forms of the Little River group.

Trans Roy. Soc. Canada (3), III, sec. 4, 115-133, pls. i-iv.
Abstract in Geol. Centralbl., XVI, 61-62.

Matthew, W. D. 1899 A

A provisional classification of the freshwater Tertiary of the West.

See Hay, O. P., 1902 A, 165. Reviewed in Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 136-139.

—— 1901 A

Additional observations on the Creodonta.

Bull. Amer. Mus. Nat. Hist., XIV, 1-38, text-figs. 1-17.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 430-434; Geol. Centralbl., III, 115; Rev. crit. Paléozool., VII, 8.

—— 1901 B

Fossil mammals of the Tertiary of northeastern Colorado.

Mem. Amer. Mus. Nat. Hist., I, 355-448, pls. xxxvii-xxxix, text-figs. 1-34.

Besides the systematic descriptions, this paper presents a discussion of the stratigraphy of the region and lists of the genera and species which have been found in the various beds.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 123-134; Geol. Centralbl., III, 117.

Matthew, W. D.—Continued 1902 A

A skull of *Dinocyon* from the Miocene of Texas.

Bull. Amer. Mus. Nat. Hist., XVI, 129-136, 4 figures.

Abstract in Geol. Centralbl., IV, 400; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 126.

—— 1902 B

On the skull of *Bunælurus*, a musteline from the White River Oligocene.

Bull. Amer. Mus. Nat. Hist., XVI, 137-140, 3 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 296; Geol. Centralbl., IV, 399.

—— 1902 C

New Canidæ from the Miocene of Colorado.

Bull. Amer. Mus. Nat. Hist., XVI, 281-290, 4 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 294-296; Geol. Centralbl., IV, 400; Rev. crit. Paléozool., VIII, 6-7.

—— 1902 D

A horned rodent from the Colorado Miocene, with a revision of the *Mylagauli*, beavers, and hares of the American Tertiary.

Bull. Amer. Mus. Nat. Hist., XVI, 291-310, 17 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 301-303; Geol. Centralbl., IV, 401; Rev. crit. Paléozool., VIII, 7; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 117.

—— 1902 E

The skull of *Hypisodus*, the smallest of the Artiodactyla, with a revision of the Hypertragulidæ.

Bull. Amer. Mus. Nat. Hist., XVI, 311-316, 4 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 141-142; Geol. Centralbl., IV, 400; Rev. crit. Paléozool., VIII, 5; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 123.

—— 1902 F

List of the Pleistocene fauna from Hay Springs, Nebraska.

Bull. Amer. Mus. Nat. Hist., XVI, 317-322.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 296-297; Rev. crit. Paléozool., VIII, 8; Geol. Centralbl., IV, 393; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 113.

—— 1902 G

The hall of fossil vertebrates.

Amer. Mus. Jour., Suppl., II, 2-19, 11 plates.

Matthew, W. D.—Continued 1902 H

News notes.

Amer. Mus. Jour., II, 40, 41. An unsigned article.

—— 1903 A

The evolution of the horse.

Amer. Mus. Jour. Suppl., III, No. 1 (Guide leaflet No. 9), 1-30, 7 plates; 4 text-figs.

A second edition was issued in 1909.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 462-463; Geol. Centralbl., V, 461; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 175.

—— 1903 B

The fauna of the Titanotherium beds at Pipestone Springs, Montana.

Bull. Amer. Mus. Nat. Hist., XIX, 197-226, 19 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 460-462; Geol. Centralbl., V, 375; Rev. crit Paléozool., VIII, 6; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 179.

—— 1903 C

A fossil hedgehog from the American Oligocene.

Bull. Amer. Mus. Nat. Hist., XIX, 227-230, 1 fig.

Abstracts in Geol. Centralbl., VI, 55; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 179; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 472; Rev. crit. Paléozool., VIII, 6.

—— 1903 D

Concerning the ancestry of the dogs.

Science (n.s.), XVII, 912-913.

Abstract in Geol. Centralbl., VI, 55.

—— 1903 E

The collection of fossil vertebrates. A guide leaflet to the exhibition halls of vertebrate palæontology in the American Museum of Natural History.

Amer. Mus. Jour., Suppl. for January, III, 1-32, 15 plates.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 175.

—— 1903 F

Second Cope collection.

Amer. Mus. Jour., III, 3-5.

An unsigned article.

—— 1904 A

A complete skeleton of *Merycodus*.

Bull. Amer. Mus. Nat. Hist., XX, 101-129, pl. iii, 21 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 311-314; Geol. Centralbl., VII, 426; Rev. crit. Paléozool., VIII, 152-153; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 190; Geol. Mag. (5), I, 518.

Matthew, W. D.—Continued 1904 B

Notice of two new Oligocene camels.

Bull. Amer. Mus. Nat. Hist., xx, 211-215.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 178; Geol. Centralbl., vii, 424; Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 301; Rev. crit. Paléozool., ix, 4.

—— 1904 C

New or little known mammals from the Miocene of South Dakota. American Museum Expedition of 1903. Pt. II: Carnivora and Rodentia.

Bull. Amer. Mus. Nat. Hist., xx, 246-265, figs. 1-13.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, ii, Ref., 127-130; Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 174-175; Geol. Centralbl., vii, 424.

—— 1904 D

The arboreal ancestry of the Mammalia.

Amer. Naturalist, xxxviii, 811-818.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, i, Ref., 139-140; Jahresber. Anat. Entwickl. (N.F.), x, Abth. 3, 174; Rev. crit. Paléozool., ix, 180; Geol. Centralbl., vii, 618.

—— 1904 E

Exhibition of the series of foot bones illustrating the evolution of the camel, recently installed in the Hall of Vertebrate Paleontology of the American Museum of Natural History.

Science (n.s.), xix, 892.

—— 1904 F

The evolution of the camel.

Amer. Geologist, xxxiii, 397.

—— 1905 A

Notice of two new genera of mammals from the Oligocene of South Dakota.

Bull. Amer. Mus. Nat. Hist., xxi, 21-26, 6 figs.

Abstracts in Geol. Centralbl., viii, 373; Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 299-300; Rev. crit. Paléozool., ix, 118; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 172.

—— 1905 B

Notes on the osteology of *Sinopa*, a primitive member of the Hyænodontidæ.

Proc. Amer. Philos. Soc., xliv, 69-72.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 127-128; Geol. Centralbl., viii, 374.

—— 1905 C

On Eocene Insectivora and on *Pantolestes* in particular.

Science (n.s.), xxi, 298-299.

Matthew, W. D.—Continued 1905 D

Fossil carnivores, marsupials and small mammals.

Amer. Mus. Jour., v, 22-59, 27 figs.

Reprinted as Guide leaflet No. 17, 1-41, 27 figs.

Abstracts in Geol. Centralbl., vii, 617; Rev. crit. Paléozool., ix, 117.

—— 1905 E

The mounted skeleton of *Brontosaurus*.

Amer. Mus. Jour., v, 62-70, 4 figs.

Abstract in Geol. Centralbl., viii, 378.

—— 1906 A

Fossil Chrysochloridæ in North America.

Science (n.s.), xxiv, 786-788.

Abstract in Sci. Progress, ii, 506.

—— 1906 B

Hypothetical outlines of the continents in Tertiary times.

Bull. Amer. Mus. Nat. Hist., xxii, 353-383, 7 maps.

—— 1906 C

The osteology of *Sinopa*, a creodont mammal of the Middle Eocene.

Proc. U. S. Nat. Mus., xxx, 203-233, pl. xvi, text-figs. 1-20.

Abstracts in Geol. Centralbl., xi, 107; Sci. Progress, i, 450; Rev. crit. Paléozool., x, 198.

—— 1907 A

A lower Miocene fauna from South Dakota.

Bull. Amer. Mus. Nat. Hist., xxiii, 169-219, 26 figs.

Abstracts in Amer. Jour. Sci. (4), xxiv, 379-380; Science (n.s), xxviii, 921; Neues Jahrb. Min. Geol. Pal., 1911, i, Ref., 306-310; Sci. Progress, ii, 506; Geol. Centralb., xi, 380-381; Rev. crit. Paléozool., xi, 217.

—— 1907 B

The relationships of the "Sparassodonta."

Geol. Mag. (5), iv, 531-535.

—— 1907 C

The skeleton of the Columbian mammoth.

Amer. Mus. Jour., vii, 5-7.

An unsigned article.

—— 1907 D

Department of vertebrate palæontology; field expedition of 1906.

Amer. Mus. Jour., vii, 6-8.

An unsigned article.

—— 1907 E

The *Naosaurus* or "ship-lizard."

Amer. Mus. Jour., vii, 36-41, 2 figs.

An unsigned article.

Matthew, W. D.—Continued 1907 F

When brute force ruled the earth.

Discovery, New York, I, 42.

—— 1908 A

Osteology of *Blastomeryx* and phylogeny of the American Cervidæ.

Bull. Amer. Mus. Nat. Hist., XXIV, 535-562, figs. 1-13.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 136; Geol. Centralbl., XIII, 393; Rev. crit. Paléozool., XIII, 72; Amer. Jour. Sci. (4), XXVII, 93; Naturw. Rundschau, XXIV, 1909, 448; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 162; Sci. Progress, III, 454.

—— 1908 B

A four-horned pelycosaurian from the Permian of Texas.

Bull. Amer. Mus. Nat. Hist., XXIV, 183-185, 1 fig.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 285-286; Sci. Progress, III, 467; Amer. Jour. Sci. (4), XXVII, 93; Geol. Centralbl., XIII, 396.

—— 1908 C

Mammalian migrations between Europe and North America.

Amer. Jour. Sci. (4), XXV, 68-70.

Abstract in Geol. Centralbl., XIII, 394.

—— 1908 D

Revision of the Pelycosauria of North America. By E. C. Case.

Science (n.s.), XXVII, 816-818.

A review of Case, E. C., 1907 E.

—— 1908 E

Allosaurus, a carnivorous dinosaur, and its prey.

Amer. Mus. Jour., VIII, 3-5, fig.

Abstracts in Geol. Centralbl., XI, 332; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 139.

—— 1908 F

Completion of *Trachodon* group.

Amer. Mus. Jour., VIII, 89.

—— 1908 G

Exhibition of *Orohippus osbornianus*.

Amer. Mus. Jour., VIII, 89.

—— 1908 H

Fossil fishes.

Amer. Mus. Jour., VIII, 110.

—— 1908 I

Exhibit illustrating the evolution of the horse.

Amer. Mus. Jour., VIII, 117-122, 5 text-figs.

Matthew, W. D.—Continued 1909 A

Observations upon the genus *Ancodon*.

Bull. Amer. Mus. Nat. Hist., XXVI, 1-7.

Abstracts in Geol. Centralbl., XVI, 220; Rev. crit. Paléozool., XIII, 72; Sci. Progress, IV, 660.

—— 1909 B

Report on skull of *Bison latifrons* in American Museum.

Science (n.s.), XXIX, 198.

—— 1909 C

Faunal lists of the Tertiary Mammalia of the West.

Bull. U. S. Geol. Surv., CCCLXI, 91-138.

Abstract in Rev. crit. Paléozool., XIII, 147-149.

—— 1909 D

The Carnivora and Insectivora of the Bridger basin, Middle Eocene.

Mem. Amer. Mus. Nat. Hist., IX, 291-567, pls. xlii-lii, text-figs. 1-118.

Abstracts in Amer. Jour. Sci. (4), XXVIII, 500; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 503-519; Geol. Centralbl., XV, 217; Rev. crit. Paléozool., XIV, 163-168; Sci. Progress, IV, 654-657, figs. 1, 2.

—— 1909 E

On a skull of *Apternodus*.

Science (n.s.), XXIX, 196.

—— 1909 F

Recent purchases of fossil vertebrates.

Amer. Mus. Jour., IX, 68-69.

—— 1909 G

The oldest land reptiles of North America.

Amer. Mus. Jour., IX, 91-95, 5 text-figs.

—— 1910 A

On the skull of *Apternodus* and the skeleton of a new artiodactyl.

Bull. Amer. Mus. Nat. Hist., XXVIII, 33-42, pl. vi, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 356-358; Geol. Centralbl., XVII, 39; Sci. Progress, V, 665-666; Rev. crit. Paléozool., XIV, 168.

—— 1910 B

On the osteology and relationships of *Paramys*, and the affinities of the Ischyromyidæ.

Bull. Amer. Mus. Nat. Hist., XXVIII, 43-72, pls. i-v, 19 text-figs.

Abstracts in Geol. Centralbl., XVII, 38-39; Sci. Progress, V, 668-669; Rev. crit. Paléozool., XIV, 168; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 212.

Matthew, W. D.—Continued 1910 C

The phylogeny of the Felidæ.

Bull. Amer. Mus. Nat. Hist., xxviii, 289-316, 15 text-figs.

Reviews in Neues Jahrb. Min. Geol. Pal., 1912, i, Ref., 353-356; Geol. Centralbl., xvi, 214-215; Nature, lxxxv, 287; Sci. Progress, v, 666; Rev. crit. Paléozool., xv, 22; Amer. Jour. Sci. (4), xxx, 421-422; Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 211.

—— 1910 D

The pose of sauropodous dinosaurs.

Amer. Naturalist, xliv, 547-560.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, i, Ref., 323-325; Geol. Centralbl., xvii, 43; Nature, lxxxv, 288; Sci. Progress, v, 679.

—— 1910 E

Schlosser on Fayum mammals.

Amer. Naturalist, xliv, 700-703.

Abstract in Sci. Progress, v, 662-663.

—— 1910 F

The Tyrannosaurus.

Amer. Mus. Jour., x, 3-8, 6 figs.

—— 1910 G

Patagonia and the Pampas Cenozoic of South America. A critical review of the correlations of Santiago Roth, 1908.

Ann. N. Y. Acad. Sci., xix, 149-160, pl. xiv.

—— 1910 H

The continuity of development.

Pop. Sci. Month., lxxvii, 473-478.

Abstracts in Sci. Progress, v, 661; Rev. crit. Paléozool., xviii, 198.

—— 1910 I

The new plesiosaur. A great marine reptile of the ancient world.

Amer. Mus. Jour., x, 246-250, 4 plates.

—— 1911 A

Fort Lee dinosaur.

Amer. Mus. Jour., xi, 28-29.

—— 1911 B

The ground sloth group.

Amer. Mus. Jour., xi, 113-119, 4 figs.

Abstract in Rev. crit. Paléozool., xvii, 204.

—— 1911 C

A tree climbing ruminant.

Amer. Mus. Jour., xi, 162-163, 1 fig.

Abstract in Rev. crit. Paléozool., xvii, 200.

—— 1911 D

The amphibians of the great coal swamps.

Amer. Mus. Jour., xi, 197-200, 2 figs.

Abstract in Rev. crit. Paléozool., xviii, 7, 94.

—— 1911 E

Fossil vertebrates—what they teach.

Amer. Mus. Jour., xi, 246-247.

Matthew, W. D.—Continued 1912 A

Symposium on ten years progress in vertebrate paleontology. African mammals.

Bull. Geol. Soc. Amer., xxiii, 156-162.

For the other articles of this symposium see the 1912 papers of Peterson, Gidley, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston and Sinclair.

—— 1912 B

Symposium on ten years progress in vertebrate paleontology. Carnivora and Rodentia.

Bull. Geol. Soc. Amer., xxiii, 181-187.

—— 1912 C

The new four-toed horse skeleton.

Amer. Mus. Jour., xii, 186, 1 fig.

Name of the genus and species not given. A species of *Eohippus*.

—— 1912 D

New dinosaurs for the American Museum.

Amer. Mus. Jour., xii, 219.

—— 1912 E

Facts and theories relating to the ancestry of man.

Amer. Mus. Jour., xii, 255-256.

—— 1912 F

The ancestry of the edentates, as illustrated by the skeleton of *Hapalops*, a Tertiary ancestor of the ground sloths.

Amer. Mus. Jour., xii, 300-303, figs.

Reprinted with additions and further illustrations. Pages 1-8, with figs.

Abstracts in Sci. Progress, viii, 637; Rev. crit. Paléozool., xvii, 201; Nature, xcii, 106.

—— 1912 G

Fossil walrus skull from Penobscot Bay.

Amer. Mus. Jour., xii, 269.

An unsigned article.

—— 1913 A

A zalambdodont insectivore from the Basal Eocene.

Bull. Amer. Mus. Nat. Hist., xxxiii, 307-314, pls. lx, lxi, 6 text-figs.

Abstracts in Ann. N. Y. Acad., xxiii, 263; Neues Jahrb. Min. Geol. Pal., 1915, i, Ref., 140; Sci. Progress, viii, 629; Rev. crit. Paléozool., xvii, 199; xxi, 49; Geol. Zentralbl., xxi, 234; Nature, xcii, 106.

—— 1913 B

Certain theoretical considerations affecting phylogeny and correlation.

Bull. Geol. Soc. Amer., xxiv, 283-292, 1 text-fig.

Abstract in Geol. Centralbl., xx, 701-702; Rev. crit. Paléozool, xvii, 198-199.

Matthew, W. D.—Continued 1913 C

American Museum expeditions for fossil vertebrates.

Amer. Mus. Jour., XIII, 286-287.

—— 1913 D

The asphalt group of fossil skeletons. The tar-pits of Rancho-La-Brea, California.

Amer. Mus. Jour., XIII, 290-297, 6 plates.

Abstracts in Sci. Progress, VIII, 628; Nature, XCII, 457, 640.

—— 1913 E

The laws of nomenclature in paleontology.

Science (n.s.), XXXVII, 788-792.

—— 1913 F

Evolution of the horse.

Amer. Mus. Guide leaflet 36, 1-62, 38 figs.

The bibliography presents 29 titles.

—— 1913 G

A tiny fossil skull.

Amer. Mus. Jour., XIII, 48.

—— 1913 H

Nomenclature in paleontology.

Science (n.s.), XXXVIII, 87-88.

—— 1914 A

[Systematic position of the mylodont sloths.]

Bull. Geol. Soc. Amer., XXV, 144.

—— 1914 B

Evidence of the Paleocene vertebrate fauna on the Cretaceous-Tertiary problem.

Bull. Geol. Soc. Amer., XXV, 381-402, 3 text-figs.

Abstract in Rev. crit. Paléozool., XX, 38.

—— 1914 C

Report of progress in the revision of the Lower Eocene faunas.

Bull. Geol. Soc. Amer., XXV, 144-145.

—— 1914 D

New discoveries in the American Eocene.

Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 491.

—— 1914 E

Extinct vertebrates.

Rep. Amer. Mus. Nat. Hist., XLV, for 1913, 57-59.

A brief report of the activities of the department of vertebrate palæontology.

—— 1914 F

Origin of Argentine wild horses.

Nature, XCII, 661.

Matthew, W. D.—Continued 1914 G

Time ratios in the evolution of mammalian phyla. A contribution to the problem of the age of the earth.

Science (n.s.), XL, 232-235.

Abstract in Rev. crit. Paléozool., XXIV, 43.

—— 1914 H

Notes on auditory ossicles of rodents.

Bull. Amer. Mus. Nat. Hist., XXXIII, 350-351, 379-380.

—— 1914 I

Fossils from Rancho La Brea.

Amer. Mus. Jour., XIV, 46.

An unsigned article.

—— 1914 J

The largest known dinosaur. A huge extinct reptile from German East Africa, the largest known quadruped.

Scient. Amer., CXI, 443, 446-447, 1 fig.

—— 1914 K

Two new fossil mammals of the Lower Eocene.

Amer. Mus. Jour., XIV, 167.

An unsigned article.

—— 1914 L

Discovery of *Moropus* skeletons.

Amer. Mus. Jour., XIV, 269.

—— 1914 M

Note on *Felis atrox*.

Nature, XCII, 640.

—— 1915 A

Climate and evolution.

Ann. N. Y. Acad. Sci., XXIV, 171-318, 33 figs.

Review in Amer. Jour. Sci. (4), XL, 83-85.

—— 1915 B

Mammoths and mastodons.

Amer. Mus. Guide leaflet 43, 1-26, 1 plate, 16 text-figs.

Abstracts in Geol. Zentralbl., XXII, 538; Geol. Mag. (6), III, 128.

—— 1915 C

Dinosaurs; with special reference to the American Museum collections.

Amer. Mus. Nat. Hist., Handbook. No. 5, 1-117; 160-162, 1 plate, 40 text-figs.

Abstracts in Rev. crit. Paléozool., XX, 91; Geol. Zentralbl., XXII, 445; Nature, XCVI, 716, fig.

—— 1915 D

A revision of the Lower Eocene Wasatch and Wind River faunas. Part I: Order Feræ (Carnivora). Suborder Creodonta.

Bull. Amer. Mus. Nat. Hist., XXXIV, 1-103, 87 text-figs.

Abstract in Nature, XCV, 276.

Matthew, W. D.—Continued 1915 E

A revision of the Lower Eocene Wasatch and Wind River faunas. Part II: Order Condylarthra, family Hyopsodontidæ.

Bull. Amer. Mus. Nat. Hist., xxxiv, 311-328, 10 text-figs.

—— 1915 F

A revision of the Lower Eocene Wasatch and Wind River faunas. Part IV: Entelonychia, Primates, Insectivora (part).

Bull. Amer. Mus. Nat. Hist., xxxiv, 429-483, pl. xv, 52 text-figs.

Abstracts in Nature, xcvi, 236; Rev. crit. Paléozool., xix, 100; xx, 88.

—— 1915 G

New discoveries in the lower Eocene mammals.

Ann. N. Y. Acad. Sci., xxiv, 383.

—— 1915 H

A new sirenian from the Tertiary of Porto Rico.

Ann. N. Y. Acad. Sci., xxvi, 439.

—— 1915 I

Affinities of *Hyoposodus*.

Bull. Geol. Soc. Amer., xxvi, 152.

A brief abstract.

—— 1915 J

Reconstruction of the skeleton of *Brachiosaurus*.

Bull. Geol. Soc. Amer., xxvi, 153.

A brief abstract.

—— 1915 K

The Tertiary sedimentary record and its problems.

Dana Commem. Lectures. Problems of American Geology, 377-478, 2 pls., 40 figs.

—— 1915 L

Report on fossil vertebrates of eastern Texas.

Bull. Geol. Soc. Amer., xxvi, 470-472.

Incorporated in Dumble, E. T., 1915 A.

Same as Matthew, W. D., 1920 E.

—— 1916 A

A marsupial from the Belly River Cretaceous. With critical observations upon the affinities of the Cretaceous mammals.

Bull. Amer. Mus. Nat. Hist., xxxv, 477-500, pls. ii-vi, 4 text-figs.

Eodelphis browni is described.

Abstracts in Rev. crit. Paléozool., xxi, 54; Nature, xcviii, 175; Neues Jahrb. Min. Geol. Pal., 1918, Ref., 207-210.

Matthew, W. D.—Continued 1916 B

New sirenian from the Tertiary of Porto Rico, West Indies.

Ann. N. Y. Acad. Sci., xxvii, 23-29, 2 figs.

Abstracts in Ann. N. Y. Acad. Sci., xxvi, 439; Rev. crit. Paléozool., xxii, 1.

—— 1916 C

Methods of correlation by fossil vertebrates.

Bull. Geol. Soc. Amer., xxvii, 515-524.

Abstract in Rev. crit. Paléozool., xxiv, 44.

—— 1916 D

The grim wolf of the tar pits.

Amer. Mus. Jour., xvi, 45-47, 2 figs.

—— 1916 E

A reptilian aëronaut. A new skeleton of the giant flying reptile of the Cretaceous period.

Amer. Mus. Jour., xvi, 251-252, 1 fig.

—— 1916 F

Scourge of the Santa Monica mountains.

Amer. Mus. Jour., xvi, 469-472, 2 figs.

Refers to *Smilodon californicus*.

—— 1916 G

Kunz on *Ivory and the Elephant*.

Amer. Mus. Jour., xvi, 485-495, 13 figs.

A review.

—— 1916 H

Supplementary note. [On climate and evolution.]

Ann. N. Y. Acad. Sci., xxvii, 11-15.

Rejoinder to Barbour, T., 1916 A.

—— 1916 I

Recent progress in vertebrate palæontology. Mammals.

Science (n.s.), xliii, 107-110.

—— 1916 J

The horse and his progenitors.

Sci. Conspectus, vi, 1-14, 9 figs.

—— 1916 K

Dinosaurs from Alberta.

Amer. Mus. Jour., xvi, 74-75.

—— 1917 A

Absence of the pollex in Perissodactyla.

Bull. Amer. Mus. Nat. Hist., xxxvii, 573-577.

Abstracts in Rev. crit. Paléozool., xxii, 58; Geol. Zentralbl., xxvii, 223.

—— 1917 B

A Paleocene bat.

Bull. Amer. Mus. Nat. Hist., xxxvii, 569-571.

Gives a description of *Zanycteris paleocenus* gen. et sp. nov.

Abstracts in Geol. Mag. (6), iv, 518; Rev. crit. Paléozool., xxiv, 91; Geol. Zentralbl., xxvii, 223.

Matthew, W. D.—Continued 1917 C

The dentition of *Nothodectes*.

Bull. Amer. Mus. Nat. Hist., xxxvii, 831-839, pls. xcix-cii.

Abstracts in Rev. crit. Paléozool., xxv, 8; Geol. Zentralbl., xxvii, 222.

—— 1917 D

A fossil deer from Argentina. With a discussion of the distribution of various types of deer in North and South America.

Amer. Mus. Jour., xvii, 207-211, 2 illustrations.

—— 1917 E

Gigantic *Megatherium* from Florida.

Bull. Geol. Soc. Amer., xxviii, 212 (abstract).

—— 1917 F

Duck-billed dinosaurs. Census of fossil skeletons.

Amer. Mus. Jour., xvii, 419.

—— 1918 A

Contributions to the Snake Creek fauna; with notes upon the Pleistocene of western Nebraska; American Museum Expedition of 1916.

Bull. Amer. Mus. Nat. Hist., xxxviii, 183-229, pls. iv-x, 20 text-figs.

Abstract in Rev. Géol. et Sci. conn., iv, 1923, 101-103.

Reviews in Nat. Hist., xix, 732; Rev. crit. Paléozool., xxvii, 19.

—— 1918 B

A fortunate collector. The discoverer [William Stein] of the giant bird *Diatryma*, which was found in the Bighorn Basin of Wyoming.

Amer. Mus. Jour., xviii, 388, 3 illustrations.

—— 1918 C

Generic nomenclatures of the Proboscidea.

Bull. Geol. Soc. Amer., xxix, 141 (Abstract).

—— 1918 D

Affinities and phylogeny of the extinct Camelidæ.

Bull. Geol. Soc. Amer., xxix, 144 (abstract).

—— 1918 E

Notes on the American Pliocene rhinoceroses.

Bull. Geol. Soc. Amer., xxix, 153 (abstract).

Matthew, W. D.—Continued 1918 F

The mounted skeleton of *Moropus* in the American Museum.

A "clawed" ungulate, from the Middle Tertiary of Nebraska.

Amer. Mus. Jour., xviii, 121-123, 2 figs.

—— 1918 G

A Tertiary alligator.

Amer. Mus. Jour., xviii, 503-506, 1 fig.

—— 1918 H

A revision of the Lower Eocene Wasatch and Wind River faunas. Insectivora (continued), Glires, Edentata.

Bull. Amer. Mus. Nat. Hist., xxxviii, 565-657, 68 text-figs.

—— 1918 I

Affinities and origin of the Antillean mammals.

Bull. Geol. Soc. Amer., xxix, 657-666.

Abstract in Rev. Géol. et Sci. conn., iv, 1923, 100-101.

Review in Rev. crit. Paléozool., xxvii, 18.

—— 1918 J

Skeletons of Cuban ground sloth in the Havana and American museums.

Amer. Mus. Jour., xviii, 313, 2 figs.

Figures *Megalocnus*.

—— 1919 A

Reply to Mr. Burroughs.

Nat. Hist., xix, 491-493.

See Burroughs, J., 1919 A.

—— 1919 B

Recent discoveries of fossil vertebrates in the West Indies and their bearing on the origin of the Antillean fauna.

Proc. Amer. Philos. Soc., lviii, 161-181.

Abstracts in Rev. Géol. et Sci. conn., iv, 1923, 103-105; Geol. Zentralbl., xxvii, 120.

—— 1920 A

A new genus of rodents from the Middle Eocene.

Jour. Mamm., i, 168-169.

—— 1920 B

Flying reptiles.

Nat. Hist., xx, 73-81, 4 figs.

—— 1920 C

Three-toed horses. A fossil record that provides direct evidence of evolution.

Nat. Hist., xx, 473-478.

Matthew, W. D.—Continued 1920 D
Canadian dinosaurs.
Nat. Hist., xx, 536-544.
Issued in 1921.
Abstract in Rev. Géol. et Sci. conn., 1923, 105.
Review in Rev. crit. Paléozool., xxvii, 23.

—— 1920 E
[Report on east Texas vertebrates.]
Bull. Univ. Texas, No. 1869, 225; 231-233.

—— 1921 A
Stehlinius, a new Eocene insectivore.
Amer. Mus. Novit., No. 14, 1-5.
Abstract in Geol. Zentralbl., xxvii, 120.

—— 1921 B
Notes on the scientific museums of Europe.
Nat. Hist., xxi, 185-190.

—— 1921 C
The Cannonball Lance formation.
Science (n.s.), liv, 27-29.

—— 1921 D
Fossil vertebrates and the Cretaceous-Tertiary problem.
Amer. Jour. Sci. (5), ii, 209-227.
Abstract in Geol. Zentralbl., xxvii, 184.

—— 1921 E
Ursus and bison.
Nat. Hist., xxi, 598-606, illustrations.
Abstract in Rev. Géol. et Sci. conn., iv, 1923, 106.

—— 1921 F
Why palæontology?
Nat. Hist., xxi, 639-641, 1 figure.

—— 1921 G
Notes—Paleontology.
Nat. Hist., xxi, 658-662, 2 figures.

—— 1921 H
A note on the Cernaysian mammal fauna.
Amer. Jour. Sci. (5), i, 509-511.
Contains quotations from Teilhard de Chardin.

—— 1922 A
Errors and changes.
In Gregory, W. K., 1922 A, pages xiii-xiv.

—— 1922 B
Phyletic relations of Lance vertebrates.
Pan-Amer. Geol., xxxvii, 68-69.

—— 1922 C
A superdreadnaught of the animal world.
The armored dinosaur *Palæoscincus*.
Nat. Hist., xxii, 333-342, 6 figs.

Matthew, W. D.—Continued 1923 A
Geological occurrence of the *Hesperopithecus* tooth.
Amer. Mus. Novit., No. 53, 11-13.

—— 1923 B
Review of Zittel's *Grundzüge der Paläontologie*. II Abt. Vertebrata, Neuarbeitet von F. Broili und Max Schlosser, 1923.
Science (n.s.), lviii, 107-109.

—— 1923 C
Recent progress and trends in vertebrate paleontology.
Bull. Geol. Soc. Amer., xxxiv, 401-418.

—— 1923 D
Fossil bones on the rock. The fossil quarry near Agate, Sioux County, Nebraska.
Nat. Hist., xxiii, 358-369, 11 figs. Abstract in Nature, cxii, 522.

—— 1923 E
Stratigraphy of the Snake Creek fossil quarries and the correlation of the faunas (Abstract).
Bull. Geol. Soc. Amer., xxxiv, 131.

—— 1923 F
Fossil vertebrates.
Nat. Hist., xxiii, 520.

—— 1924 A
Note on *Serridentinus* Osborn.
Amer. Mus. Novit., cxlviii, 5.

—— 1924 B
Fossil horses from the Texas Pliocene.
Nat. Hist., xxiv, 629-631.

—— 1924 C
Third contribution to the Snake Creek fauna.
Bull. Amer. Mus. Nat. Hist., l, 59-210, 63 figs.
Abstract in Geol. Zentralbl., xxxii, 376.

—— 1924 D
A new link in the ancestry of the horse.
Amer. Mus. Novit. No. 131, 1-2.

—— 1924 E
Correlation of the Tertiary formations of the Great Plains.
Bull. Geol. Soc. Amer., xxxv, 743-754, 1 table.

—— 1924 F
Vertebrate palæontology. Welcomed home by a dinosaur. Fossil birds from Nebraska.
Nat. Hist., xxiv, 118-120, 1 fig.

Matthew, W. D.—Continued 1924 G
Fossil horses from the Texas Pliocene.
Nat. Hist., XXIV, 629-631.

—— 1924 H
Vertebrate fossils.
Nat. Hist., XXIV, 726-727.

—— 1925 A
Fossil mammals from St. Petersburg, Florida.
Nat. Hist., XXV, 97.

—— 1925 B
Blanco and associated formations of northern Texas.
Bull. Geol. Soc. Amer., XXXVI, 221-222.

—— 1925 C
The value of palæontology.
Nat. Hist., XXV, 166-168.

—— 1925 D
An American fossil giraffe, *Giraffa nebrascensis*, sp. nov.
Bull. Neb. State Mus., I, No. 4, 33-39, figs. 14-20.

—— 1925 E
A dissenting opinion.
Proc. Nat. Acad. Sci., XI, art. 12, 751.
In Osborn, H. F., 1925 C.

—— 1926 A
Note on rhinoceroses.
Bull. Dept. Geol. Univ. Calif., XVI, 50.
In Stock and Furlong, 1926 A.

—— 1926 B
On a new primitive deer and two traguloid genera from the Lower Miocene of Nebraska.
Amer. Mus. Novit., No. 215, 1-8, 3 figs.

—— 1926 C
The evolution of the horse. A record and its interpretation.
Quart. Rev. Biol., I, 139-185, 27 figs.
The extensive bibliography is found on pages 178-185.

—— 1926 D
Early days of fossil hunting in the high Plains.
Nat. Hist., XXVI, 449-454, 5 figs.

—— 1928 A
Xenotherium, an edentate.
Jour. Mamm., IX, 70, 71.

——, and B. **Brown** 1915 A
Corythosaurus, the new duck-billed dinosaur.
Amer. Mus. Jour., XV, 427-428.

Matthew, W. D., and B. **Brown**—Continued 1922 A
The family Deinodontidæ, with notice of a new genus from the Cretaceous of Alberta.
Bull. Amer. Mus. Nat. Hist., XLVI, 367-385, 1 text-fig.
Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 106-107; Geol. Zentralbl., XXVIII, 444; Neues Jahrb. Min. Geol. Pal., I, 304-306.
Review in Rev. crit. Paléozool., XXVII, 24.

—— —— 1923 A
Preliminary notices of skeletons and skulls of Deinodontidæ from the Cretaceous of Alberta.
Amer. Mus. Novit., No. lxxxix, 1-9, 5 figs.
Review in Rev. crit. Paléozool., XXVIII, 169, 1924.
Abstract in Geol. Zentralbl., XXX, 442.

——, and Harold **Cook** 1909 A
A Pliocene fauna from western Nebraska.
Bull. Amer. Mus. Nat. Hist., XXVI, 361-414, 27 text-figs.
Abstracts in Geol. Centralbl., XV, 649; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 285-288; Amer. Jour. Sci. (4), XXVIII, 500-501; Rev. crit. Paléozool., XIV, 9; Sci. Progress, IV, 652.

—— —— 1909 B
Pliocene fauna from western Nebraska.
Science (n.s.), XXIX, 196-197.

——, and W. **Granger** 1915 A
See **Matthew**, W. D., 1915 D, E, F.

—— —— 1917 A
The skeleton of *Diatryma*, a gigantic bird from the Lower Eocene of Wyoming.
Bull. Amer. Mus. Nat. Hist., XXXVII, 307-326, pls. xx-xxxiii, 1 text-fig.
Abstracts in Bull. Geol. Soc. Amer., XX, 212; Rev. crit. Paléozool., XXV, 56; Geol. Zentralbl., XXVII, 223; Nature, CV, 117; Sci. Progress, XII, 425; Geol. Mag. (6), IV, 469.

—— —— 1917 B
A giant Eocene bird.
Amer. Mus. Jour., XVII, 416-418, 2 figs.

—— —— 1921 A
New genera of Paleocene mammals.
Amer. Mus. Novit., No. 13, 1-7.
Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 106; Geol. Zentralbl., XXVII, 120.
Review in Rev. crit. Paléozool., XXVII, 24.

—— —— 1923 A
The fauna of the Houldjin gravels.
Amer. Mus. Novit., No. 97, 1-9, 6 figs.

Matthew, W. D., and W. **Granger**—Continued 1923 B
Nine new rodents from the Oligocene of Mongolia.
Amer. Mus. Novit., No. 102, 1-10, 12 figs.

—— —— 1924 A
New insectivores and ruminants from the Tertiary of Mongolia, with remarks on the correlation.
Amer. Mus. Novit., No. 105, 1-7, 3 figs.

—— —— 1924 B
New Carnivora from the Tertiary of Mongolia.
Amer. Mus. Novit., No. 104, 1-9, 7 figs.

—— —— 1925 A
Fauna and correlation of the Gashato formation of Mongolia.
Amer. Mus. Novit., No. 186, 1-12, 14 figs.

—— —— 1925 B
New creodonts and rodents from the Ardyn Obo formation of Mongolia.
Amer. Mus. Novit., No. 193, 1-7, 9 figs.

—— —— 1925 C
New mammals from the Shara Murun Eocene of Mongolia.
Amer. Mus. Novit., No. 194, 1-11, 10 figs.

—— —— 1925 D
New mammals from the Irdin Manha Eocene of Mongolia.
Amer. Mus. Novit., No. 198, 1-10, 10 figs.

—— —— 1925 E
New ungulates from the Ardyn Obo formation of Mongolia.
Amer. Mus. Novit., No. 195, 1-12, 13 figs.

—— —— 1925 F
The smaller perissodactyls of the Irdin Manha formation, Eocene of Mongolia.
Amer. Mus. Novit., No. 199, 1-9, 9 figs.

See **Cope** and **Matthew,** 1915 A.

Maxon, John H. 1928 A
Merychippus isonesus from the later Tertiary of the Crooked River region, Oregon.
Geol. Soc. Amer. (Cordill. Sec.), 27th meet. Berkeley. List of papers with abstracts, 23.

Mayer, A. F. 1842 A
Ueber die Bestimmung der sogenannten Beutelknochen.
Froriep's Notizen, XXI, cols. 164-165.

—— 1849 A
Ueber das Becken des Delphins.
Arch. Anat. Physiol., Med., 1849, 583-587.

Mayer, A. F.—Continued 1862 A
Ueber die Gelenkverbindungen an den Stacheln der Flossen einiger Fische.
Verh. naturh. Ver. Rheinl., XIX (N.F. IX), Sitz-Ber., 108-111.

Mayer, Carl 1824 A
Ueber die hintere Extremität der Ophidier.
Nova Acta Acad. Leop. Carol., XII, 819, pls. lxvi, lxvii.

—— 1847 A
Beiträge zur Anatomie der Elephanten und der übrigen Pachydermen.
Nova Acta Acad. Leop. Carol., XXII, 1-88, pls. i-ix.

Mayet, Lucien, and Frédéric **Roman** 1923 A
Les éléphants pliocènes. I: *Elephas planifrons* Falconer des sables de Chagny et faunes de mammifères d'age Villafranchien-Saint-Prestien.
Ann. Univ. Lyon (n.s.), fasc. 42, i-ix; 1-87, pls. i-v, text-figs. 1-15.

Mayhew, Roy L. 1924 A
The skull of *Lepidosteus platostomus.*
Jour. Morphol., XXXVIII, 315-341, 4 pls.
In the bibliography are 43 titles.

Mayhoff, Hugo 1914 A
Zur Ontogenese des Kopfes der Plattfische.
Zool. Anz., XLIII, 389-404.

Mead, Charles S. 1904 A
Comparative chart of the vertebrate skull.
Ohio Naturalist, IV, 52-55, 2 charts.

—— 1906 A
Adaptive modifications of occipital condyles in Mammalia.
Amer. Naturalist, XL, 475-483, 12 text-figs.
Abstracts in Rev. crit. Paléozool., XI, 213; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 66.

—— 1909 A
The chondrocranium of an embryo pig, *Sus scrofa.*
Amer. Jour. Anat., IX, 167-209, pls. i-iv, 11 text-figs.
The bibliography presents 30 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 66-67.

Meckel, Johann Friedrich 1809 A
Tabellen I-IV of Froriep and Meckel's Vorlesungen über vergleichenden Anatomie von G. Cuvier.

Meckel, J. F.—Continued 1823 A

Ueber den in dem Skelet ausgesprochnen Uebergang von den Wiederkäuern durch die Kameele zu den Einhufern.

Deutsch. Arch. Physiol., VIII, 1-20.

—— 1825 A

System des vergleichenden Anatomie.

Zweiter Th., erste Abth., 1824, i-x; 1-542; zweite Abth., 1825, i-x; 1-638.

Meek, A. 1907 A

The segments of the vertebrate brain and head.

Anat. Anz., XXXI, 408-415, 5 figs.

—— 1908 A

The olfactory organ of the crocodile and the homologies of the ethnoid region.

Univ. of Durham Philos. Soc., III, 1-2, 3 figs.

—— 1911 A

On the morphogenesis of the head of the crocodile.

Jour. Anat. Physiol. Lond., XLV, 357-377, 16 figs.

—— 1912 A

The segments of the head.

Verh. internat. Zool.-Kongr., VIII, Gratz, 1910, 212-215, 3 figs.

—— 1916 A

The migrations of fish.

London, 8vo., i-xviii+1-427 pages, 128 figs.

Meek, F. B. 1855 A

Catalogue of the fossils of Missouri.

Geol. Surv. Missouri, I, II, by G. C. Swallow, pt. ii, 215.

—— 1869 A

A reply to some remarks published by Prof. Swallow on certain disputed points in the geology of Kansas and other northwestern localities. Pages 1-9.

Printed and circulated privately.

—— 1872 A

Report on the paleontology of eastern Nebraska.

Rep. U. S. Geol. Surv. (Hayden), Nebraska and adj. Terrs. Final, 83-239.

Mehl, M. G. 1912 A

Pantylus cordatus Cope.

Jour. Geol., XX, 21-27, 2 text-figs.

Abstracts in Geol. Centralbl., XVII, 705; Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 144.

Review in Rev. crit. Paléozool., XVI, 240.

Mehl, M. G.—Continued 1912 B

Murænosaurus? reedii sp. nov. and *Tricleidus? laramiensis* Knight, American Jurassic plesiosaurs.

Jour. Geol., XX, 344-352, 3 text-figs.

Abstracts in Geol. Centralbl., XVIII, 670; Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 526; Sci. Progress, VIII, 16.

—— 1912 C

Review of E. C. Case: *Revision of the Amphibia and Pisces of the Permian of North America* (Case, E. C., 1911 B).

Science (n.s.), XXXVI, 408-409.

—— 1913 A

A description of *Chenoprosopus milleri.*

Publ. Carnegie Instn. Wash., No. 186, 11-16, figs. 4-7.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 155; Amer. Jour. Sci. (4), XXXVII, 118; Geol. Zentralbl., XXI, 40; Nature, XCII, 432.

—— 1913 B

Angistorhinus, a new genus of Phytosauria from the Trias of Wyoming.

Jour. Geol., XXI, 186-191, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 153-154.

—— 1915 A

The Phytosauria of the Trias.

Jour. Geol., XXIII, 129-165, text-figs. 1-20.

Abstract in Rev. crit. Paléozool., XX, 136.

—— 1915 B

Poposaurus gracilis, a new reptile from the Triassic of Wyoming.

Jour. Geol., XXIII, 516-522, 2 text-figs.

—— 1915 C

New reptiles from the Trias of Arizona and New Mexico.

Science (n.s.), XLI, 735.

—— 1916 A

New or little known phytosaurs from Arizona.

Univ. Okla. Bull. (Quart. n.s.), CIII, 3-28, pl. ii, 11 text-figs.

Abstract in Rev. crit. Paléozool., XX, 138.

—— 1916 B

Caimanoidea visheri, a new crocodilian from the Oligocene of South Dakota.

Jour. Geol., XXIV, 47-56, 4 text-figs.

Abstract in Rev. crit. Paléozool., XX, 141.

—— 1921 A

A new form of *Diplocaulus.*

Jour. Geol., XXIX, 48-56, 2 figs.

Mehl, M. G.—Continued 1922 A
A new phytosaur from the Trias of Arizona [New Mexico].
Jour. Geol., xxx, 144-157, 3 figs.
Abstract in Geol. Zentralbl., xxviii, 376.

—— 1925 A
Brain of the phytosaurs.
Bull. Geol. Soc. Amer., xxxvi, 225 (abstract).

—— 1925 B
Development of a second palate in the Phytosauria.
Bull. Geol. Soc. Amer., xxxvi, 227.

—— 1926 A
Trematops thomasi, a new amphibian species from the Permian of Oklahoma.
Jour. Geol., xxxiv, 466-474, 5 figs.

—— 1927 A
Apatodonosaurus, a new genus of ichthyosaurs from the Jurassic of Wyoming.
Bull. Geol. Soc. Amer., xxxviii, 233-234.

——, and G. M. **Schwartz** 1916 A
The Triassic fossil bearing horizons near Wingate, New Mexico. With a description of *Acompsosaurus wingatensis* Mehl.
Univ. Okla. Bull. (Quart. n.s.), cIII, 29-39, pl. iii, text-figs. 12-14.
Abstract in Rev. crit. Paléozool., xx, 138.

Mehnert, E. 1887 B
Untersuchungen über das os pelvis der Vögel.
Sitz.-Ber. naturf. Ges. Dorpat., viii, 212-213.

—— 1891 A
Untersuchungen über die Entwicklung des Os hypoischium (Os cloacæ aut.), Os epipubis und Ligamentum medianum pelvis bei den Eidechsen.
Morphol. Jahrb., xvii, 123-143, pl. viii.

Meissner, Walerian 1907 A
Neue Beiträge zur vergleichenden Anatomie des Schultergürtels der Acipenseriden.
Zool. Anz., xxxii, 465-468, 2 text-figs.

—— 1907 B
Materialien zur vergleichenden Anatomie der Knorpelganoiden. I: Der Schultergürtel der Acipenseriden.
Trav. Soc. Nat. Univ. Kasan, xl, art. 6, 1-39, pls. i-ii, 15 text-figs.
The text is in Russian.

Menegaux, A. 1909 A
Contribution a l'étude des édentés actuels, famille des bradypodidés.
Arch. Zool. exper. (5), I, 277-344, pls. iii-vi.
Appended is a bibliography of 44 titles.

Menmuir, W. H. 1902 A
The teeth of fishes contrasted with those of other orders.
Trans. Edinb. Field Nat. Micr. Soc., IV, 272-277.

Mercer, H. C. 1885 A
The Lenape stone; or the Indian and the mammoth.
New York and London, G. P. Putnam's Sons, i-iii+1-95 pages, 23 figures.

—— 1894 B
Progress of field work of the department of American and prehistoric archæology of the University of Pennsylvania.
Amer. Naturalist, xxviii, 355-357; 626-628.

—— 1894 C
Cave exploration in the eastern United States.
Univ. Penn. Dept. Archæol., 1894, 2 pages.

—— 1895 B
The antiquity of man at Petit Anse (Avery's Island), Louisiana.
Amer. Naturalist, xxix, 393-394.

—— 1896 A
Cave exploration in the eastern United States. Preliminary report.
Univ. Penn. Dept. Archæol., 1896, 2 pages, 1 text-fig.

Merriam, C. Hart 1884 A
The vertebrates of the Adirondack region, northeastern New York.
Trans. Linn. Soc. N. Y., II, 5-233.
On pages 40-47 are found "Notes on exterminated and extinct species."

—— 1886 A
Description of a new species of *Aplodontia* from California.
Ann. N. Y. Acad. Sci., III, 312-328, pls. xix, xx.

—— 1889 A
Preliminary revision of the North American pocket mice (Genera *Perognathus* et *Cricetodipus* auct.). With descriptions of new species and subspecies and a key to the known forms.
N. A. Fauna No. i, 1-36, pls. i-iv.

Merriam, C. Hart—Continued 1890 A

Contribution toward a revision of the little striped skunks of the genus *Spilogale*. With descriptions of seven new species.

N. A. Fauna No. iv, 1-15, 1 pl., 2 text-figs. and a table of measurements.

—— 1892 A

The geographic distribution of life in North America, with special reference to the Mammalia.

Proc. Biol. Soc. Wash., VII, 1-64.

—— 1894 B

Abstract of a study of the American wood rats, with descriptions of fourteen new species and subspecies of the genus *Neotoma*.

Proc. Biol. Soc. Wash., IX, 117-128.

—— 1896 B

Synopsis of the weasels of North America.

N. A. Fauna No. xi, 1-45, pls. i-v, 16 text-figs.

—— 1896 C

Revision of the lemmings of the genus *Synaptomys*, with descriptions of new species.

Proc. Biol. Soc. Wash., X, 55-64, 5 text-figs.

Appended is a bibliography of 14 titles.

—— 1897 A

Description of a new *Bassariscus* from Lower California, with remarks on *Bassaris raptor* Baird.

Proc. Biol. Soc. Wash., XI, 185-187.

—— 1897 B

Revision of the coyotes, or prairie wolves, with descriptions of new forms.

Proc. Biol. Soc. Wash., XI, 19-33.

—— 1897 C

Notes on the chipmunks of the genus *Eutamias* occurring west of the east base of the Cascade-Sierra system, with descriptions of new forms.

Proc. Biol. Soc. Wash., XI, 189-212.

—— 1900 A

Preliminary revision of the North American red foxes.

Proc. Wash. Acad. Sci., II, 661-676, pls. xxxvi-xxxvii.

—— 1901 A

Preliminary revision of the pumas (*Felis concolor* group).

Proc. Wash. Acad. Sci., III, 577-600.

Merriam, C. Hart—Continued 1901 B

Synopsis of the rice rats (genus *Oryzomys*) of the United States and Mexico.

Proc. Wash. Acad. Sci., III, 273-295.

—— 1906 A

Is mutation a factor in the evolution of the higher vertebrates?

Science (n.s.), XXIII, 241-257, 3 figs.

—— 1926 A

The buffalo in northeastern California.

Jour. Mamm., VII, 211-214.

Merriam, John C. 1900 A

Ground sloths in the California Quaternary.

Bull. Geol. Soc. Amer., XI, 612-614, pl. lviii.

Abstract in Science (n.s.), XI, 219.

—— 1900 B

Classification of the John Day beds.

Science (n.s.), XI, 219-220.

—— 1901 A

A contribution to the geology of the John Day basin.

Bull. Dept. Geol. Univ. Calif., II, 269-314, pls. vi-viii, 1 text-fig.

Review in Science (n.s.), XIV, 1901, 331.

—— 1901 B

The John Day [Oregon] fossil beds.

Harper's Month. Mag., CII, 581-590, 7 figs.

Brief abstract in Geol. Centralbl., IX, 653.

—— 1902 A

Triassic Ichthyopterygia from California and Nevada.

Bull. Dept. Geol. Univ. Calif., III, 63-108, pls. v-xvi, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 147-150; Geol. Centralbl., IV, 401; Rev. crit. Paléozool., VII, 133-134.

—— 1902 B

Triassic Reptilia from northern California.

Science (n.s.), XV, 411-412 (abstract).

—— 1903 A

New Ichthyosauria from the Upper Triassic of California.

Bull. Dept. Geol. Univ. Calif., III, 249-263, pls. xxi-xxiv.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 150; Geol. Centralbl., VI, 426; Rev. crit. Paléozool., VII, 193-194; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 164-165.

Merriam, John C.—Continued 1903 B

The Pliocene and Quaternary Canidæ of the Great Valley of California.

Bull. Dept. Geol. Univ. Calif., III, 277-290, pls. xxviii-xxx.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 469-470; Geol. Centralbl., V, 39; Rev. crit. Paléozool., VIII, 77; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 183.

—— 1903 C

Primitive characters of the Triassic *Ichthyosaurus.*

Science (n.s.), XVII, 297.

See also Bull. Geol. Soc. Amer., XIV, 536.

—— 1903 D

Recent literature on Triassic Ichthyosauria.

Science (n.s.), XVIII, 311-312.

Abstract in Geol. Centralbl., VI, 426.

—— 1904 A

A new marine reptile from the Triassic of California.

Bull. Dept. Geol. Calif., III, 419-421, fig. 1.

Abstracts in Geol. Centralbl., IX, 661; Rev. crit. Paléozool., IX, 73-74; Jour. Geol., XIII, 183.

—— 1904 B

The types of limb structure in Triassic ichthyosaurs.

Science (n.s.), XIX, 218.

—— 1904 C

A new group of marine reptiles from the Upper Triassic of California.

Science (n.s.), XIX, 218.

—— 1905 A

A primitive ichthyosaurian limb from the Middle Triassic of Nevada.

Bull. Dept. Geol., Univ. Calif., IV, 33-38, pl. v.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 151; Rev. crit. Paléozool., IX, 126.

—— 1905 B

A new sabre-tooth from California.

Bull. Dept. Geol., Univ., Calif., IV, 171-174, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 133; Rev. crit. Paléozool., X, 15.

—— 1905 C

The types of limb-structure in the Triassic Ichthyosauria.

Amer. Jour. Sci. (4), XIX, 23-30, 7 text-figs.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 163; Rev. crit. Paléozool., IX, 71-73.

Merriam, John C.—Continued 1905 D

The occurrence of ichthyosaur-like remains in the Upper Cretaceous of Wyoming.

Science (n.s.), XXII, 640-641.

—— 1905 E

A new group of marine reptiles from the Triassic of California.

C. R. Congr. internat. Zool., VI, Bern, 1904, 247-248.

—— 1905 F

The Thalattosauria, a group of marine reptiles from the Triassic of California.

Mem. Calif. Acad. Sci., V, 1-52, pls. i-viii.

Abstracts in Amer. Jour. Sci. (4), XX, 161; Knowledge, II, 208; Rev. crit. Paléozool., IX, 122.

—— 1905 G

Osteology of *Baptanodon* Marsh.

Amer. Jour. Sci. (4), XX, 403-404.

—— 1906 A

Carnivora from the Tertiary formations of the John Day region.

Bull. Dept. Geol. Univ. Calif., V, 1-64, pls. i-vi.

Abstracts in Amer. Jour. Sci. (4), XXIV, 377-379; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 130-133; Rev. crit. Paléozool., XI, 216; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 167.

—— 1906 B

Preliminary note on a new marine reptile from the Middle Triassic of Nevada.

Bull. Dept. Geol. Univ. Calif., V, 75-79, pls. viii-ix.

Abstracts in Rev. crit. Paléozool., XI, 75; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 161.

—— 1906 C

On the occurrence of *Desmostylus* Marsh.

Science (n.s.), XXIV, 151-152.

—— 1906 D

Recent discoveries of Quaternary mammals in southern California.

Science (n.s.), XXIV, 248-250.

—— 1906 E

Recent cave explorations in California.

Amer. Anthrop. (2), VIII, 221-228.

Reviewed in Nature, LXXV, 156.

Merriam, John C.—Continued 1907 A

The occurrence of Middle Tertiary mammal-bearing beds in northwestern Nevada.

Science (n.s.), xxvi, 380-382.

—— 1908 A

Notes on the osteology of the thalattosaurian genus *Nectosaurus*.

Bull. Dept. Geol. Univ. Calif., v, 217-223, pls. xvii-xviii.

Brief abstracts in Geol. Centralbl., xii, 222; Rev. crit. Paléozool., xiii, 12.

—— 1908 B

Primitive characters of American Triassic ichthyosaurs.

Bull. Geol. Soc. Amer., xviii, 659 (abstract).

—— 1908 C

Triassic Ichthyosauria, with special reference to the American forms.

Mem. Univ. Calif., i, 1-196, pls. i-xviii, 154 text-figs.

Reviewed in Amer. Jour. Sci. (4), xxvii, 91-92; Neues Jahrb. Min. Geol. Pal., 1909, i, Ref., 445; Geol. Centralbl., xiii, 245; Sci. Progress, iii, 465; Rev. crit. Paléozool., xiii, 13-15; Nature, lxxix, 228.

Abstract in Geol. Mag. (5), vi, 36.

—— 1908 D

Death-trap of the ages.

Sunset Mag., xxi, 467-475, 10 illustrations.

A popular account of the tar pools at Rancho La Brea, Calif.

Abstract in Geol. Mag. (5), vi, 228.

—— 1909 A

The skull and dentition of an extinct cat closely allied to *Felis atrox* Leidy.

Bull. Dept. Geol. Univ. Calif., v, 291-304, pl. xxvi, 3 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, i, Ref., 134; Geol. Centralbl., xiv, 488; Rev. crit. Paléozool., xiv, 12; Amer. Jour. Sci. (4), xxviii, 501; Sci. Progress, iv, 653.

—— 1909 B

The occurrence of strepsicerine antelopes in the Tertiary of northwestern Nevada.

Bull. Dept. Geol. Univ. Calif., v, 319-330, text-figs. 1-7.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, i, 311; Geol. Centralbl., xiv, 489; Rev. crit. Paléozool., xiv, 169; Amer. Jour. Sci. (4), xxix, 271; Sci. Progress, iv, 660.

—— 1909 C

A death-trap which antedates Adam and Eve.

Harper's Weekly liii, Dec. 18, 11-12, 9 figs.

Merriam, John C.—Continued 1909 D

Note on the occurrence of human remains in Californian caves.

Science (n.s.), xxx, 531-532.

—— 1910 A

New Mammalia from Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., v, 391-395.

Abstract in Geol. Centralbl., xv, 62.

—— 1910 B

The skull and dentition of a primitive ichthyosaurian from the Middle Triassic.

Bull. Dept. Geol. Univ. Calif., v, 381-390, pl. xl.

Describes *Phalarodon fraasi* new genus and species.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, i, Ref., 462; Geol. Centralbl., xv, 218; Rev. crit. Palézool., xiv, 82; Sci. Progress, vi, 575.

—— 1910 C

Tertiary mammal beds of Virgin Valley and Thousand Creek in northwestern Nevada. Pt. I: Geologic history.

Bull. Dept. Geol. Univ. Calif., vi, 21-53, pls. i-xii.

Review in Rev. crit. Paléozool., xvi, 80.

Abstract in Geol. Centralbl., xix, 384.

—— 1910 D

The relation of paleontology to the history of man, with particular reference to the American problem.

Pop. Sci. Month., lxxvii, 597-601.

—— 1910 E

The true story of the Calaveras skull.

Sunset Mag., xxiv, 153-158, 7 illustrations.

—— 1911 A

Note on a gigantic bear from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., vi, 163-166, figs. 1-3.

Describes new species *Arctotherium californicum*.

—— 1911 B

Tertiary mammal beds of Virgin Valley and Thousand Creek in northwestern Nevada. Pt. II: Vertebrate faunas.

Bull. Dept. Geol. Univ. Calif., vi, 199-304, pls. xxxii, xxxiii, 80 text-figs.

Abstract in Sci Progress, vi, 558.

Merriam, John C.—Continued 1911 C

Notes on the relationships of the marine saurian fauna described from the Triassic of Spitzbergen by Wiman.

Bull. Dept. Geol. Univ. Calif., VI, 317-327, 6 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, 476; Sci. Progress, VI, 574.

Review in Rev. crit. Paléozool., XVI, 150.

—— 1911 D

Notes on the genus *Desmostylus* of Marsh.

Bull. Dept. Geol. Univ. Calif., VI, 403-412, 11 text-figs.

Abstracts in Geol. Centralbl., XVII, 703; Sci. Progress, VI, 564.

Review in Rev. crit. Paléozool., XVI, 78.

—— 1911 E

A collection of mammalian remains from Tertiary beds on the Mohave Desert.

Bull. Dept. Geol. Univ. Calif., VI, 167-169, pl. XXIX.

Abstract in Geol. Centralbl., XVII, 37.

—— 1911 F

The fauna of Rancho La Brea. Pt. I: Occurrence.

Mem. Univ. Calif., I, 197-213, pls. XIX-XXIII, 1 text-fig.

Review in Rev. crit. Paléozool., XVI, 83.

—— 1912 A

Recent discoveries of Carnivora in the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VII, 39-46. 10 text-figs.

Abstracts in Geol. Centralbl., XIX, 442; Sci. Progress, VIII, 5.

—— 1912 B

Symposium on ten years progress in vertebrate paleontology. Marine reptiles.

Bull. Geol. Soc. Amer., XXIII, 221-223.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Dean, Eastman, Osborn, Williston and Sinclair.

—— 1912 C

The fauna of Rancho La Brea. Pt. II: Canidæ.

Mem. Univ. Calif., I, 215-272, pls. XXIV-XXVIII, 43 text-figs.

Abstracts in Geol. Centralbl., XIX, 400; Sci. Progress, VIII, 5; Rev. crit. Paléozool., XVII, 4.

Merriam, John C.—Continued 1913 A

Tapir remains from late Cenozoic beds of the Pacific Coast region.

Bull. Dept. Geol. Univ. Calif., VII, 169-175, 2 text-figs.

Abstracts in Geol. Centralbl., XX, 703; Nature, XCII, 514.

—— 1913 B

The skull and dentition of a camel from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VII, 305-323, text-figs. 1-11.

Abstracts in Geol. Centralbl., XX, 703; Rev. crit. Paléozool., XVII, 202.

—— 1913 C

A peculiar horn or antler from the Mohave Miocene of California.

Bull. Dept. Geol. Univ. Calif., VII, 335-339, 4 text-figs.

Abstract in Rev. crit. Paléozool., XX, 43.

—— 1913 D

Notes on the canid genus *Tephrocyon*.

Bull. Dept. Geol. Univ. Calif., VII, 359-372, 16 text-figs.

Abstracts in Geol. Centralbl., XX, 703; Sci. Progress, VIII, 630; Rev. crit. Paléozool., XX, 41.

—— 1913 E

Vertebrate fauna of the Orindan and Siestan beds in middle California.

Bull. Dept. Geol. Univ. Calif., VII, 373-385, 9 text-figs.

Abstracts in Rev. crit. Paléozool., XX, 42; Geol. Zentralbl., XXI, 38.

—— 1913 F

Preliminary report on the horses of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VII, 397-418, 14 text-figs.

Abstracts in Rev. crit. Paléozool., XIX, 10; L'Anthrop. Paris, XXVI, 1915, 567; Geol. Zentralbl., XXI, 233.

—— 1913 G

New anchitheriine horses from the Tertiary of the Great Basin area.

Bull. Dept. Geol. Univ. Calif., VII, 419-434, 5 text-figs.

Abstracts in Rev. crit. Paléozool., XIX, 8; Geol. Zentralbl., XXI, 233.

—— 1913 H

New protohippine horses from Tertiary beds on the western border of the Mohave Desert.

Bull. Dept. Geol. Univ. Calif., VII, 435-441, 4 text-figs.

Abstracts in Rev. crit. Paléozool., XIX, 9; Geol. Zentralbl., XXI, 234.

Merriam, John C.—Continued 1914 A

The occurrence of Tertiary mammalian remains in northeastern Nevada.

Bull. Dept. Geol. Univ. Calif., VIII, 275-281, 3 text-figs.

Abstracts in Rev. crit. Paléozool., XX, 42; Geol. Zentralbl., XXIX, 472.

—— 1914 B

Preliminary report on the discovery of human remains in an asphalt deposit at Rancho La Brea.

Science (n.s.), XL, 198-203.

—— 1914 C

Correlation between the Tertiary of the Great Basin and that of the marginal marine province in California.

Science (n.s.), XL, 643-645.

—— 1914 D

Vertebrate fossils found in region about San Francisco, California.

Folio U. S. Geol. Surv., San Francisco, CXCIII, 13-15.

—— 1914 E

Review of Holland and Peterson's *Osteology of the Chalicotheroidea.*

Jour. Geol., XXII, 818.

—— 1914 F

The Brea maid.

Bull. So. Calif. Acad. Sci., XIII, 27-29.

—— 1914 G

Vertebrate fauna of the Orindan and Siestan formations.

Bull. Geol. Soc. Amer., XXV, 156 (Abstract).

—— 1915 A

New species of the *Hipparion* group from the Pacific Coast and Great Basin provinces of North America.

Bull. Dept. Geol. Univ. Calif., IX, 1-8, 5 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 86; Geol. Zentralbl., XXIX, 473.

—— 1915 B

Remains of land mammals from marine Tertiary beds in the Tejon Hills, California.

Bull. Dept. Geol. Univ. Calif., VIII, 283-288, 7 text-figs.

Abstract in Rev. crit. Paléozool., XX, 42.

—— 1915 C

An occurrence of mammalian remains in a Pleistocene lake deposit at Astor Pass, near Pyramid Lake, Nevada.

Bull. Dept. Geol. Univ. Calif., VIII, 377-382, pl. xli, 3 text-figs.

Abstracts in Rev. crit. Paléozool., XX, 42; Geol. Zentralbl., XXIX, 443.

Merriam, John C.—Continued 1915 D

New horses from the Miocene and Pliocene of California.

Bull. Dept. Geol. Univ. Calif., IX, 49-58, 12 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 86; Geol. Zentralbl., XXIX, 473.

—— 1915 E

Tertiary vertebrate faunas of the North Coalinga region of California. A contribution to the study of palæontologic correlation in the Great Basin and Pacific Coast provinces.

Trans. Amer. Philos. Soc. (2), XXII, 191-234, 49 text-figs.

Issued also as a reprint of pages 1-44.

—— 1915 F

Extinct faunas of the Mohave desert, their significance in a study of the origin and evolution of life in America.

Pop. Sci. Month., LXXXVI, 245-264, 11 text-figs.

—— 1915 G

Significant features in the history of life on the Pacific coast.

Nature and science on the Pacific coast, San Francisco, 8vo., i-xii+1-302 pages, with maps, plates, and text-figs. The article cited occupies pages 88-103.

—— 1915 H

Relation of the Tertiary geological scale of the Great Basin to that of the Pacific coast marginal province.

Bull. Geol. Soc. Amer., XXVI, 136-137.

A brief abstract.

—— 1916 A

Tertiary vertebrate fauna from the Cedar Mountain region of western Nevada.

Bull. Dept. Geol. Univ. Calif., IX, 161-198, pl. viii, 48 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 90; Geol. Mag. (6), III, 284.

—— 1916 B

Relationship of *Equus* to *Pliohippus* suggested by characters of a new species from the Pliocene of California.

Bull. Dept. Geol. Univ. Calif., IX, 525-534, 18 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 86; Geol. Mag. (6), III, 283.

Merriam, John C.—Continued 1916 C

Mammalian remains from the Chanac formation of the Tejon Hills, California.

Bull. Dept. Geol. Univ. Calif., x, 111-127, 21 text-figs.

Abstract in Rev. crit. Paléozool., xxi, 86.

—— 1916 D

Mammalian remains from a late Tertiary formation at Ironside, Oregon.

Bull. Dept. Geol. Univ. Calif., x, 129-135, 3 text-figs.

—— 1916 E

Remarks made on papers presented before Palæontological Society.

Bull. Geol. Soc. Amer., xxvii, 169, 170, 172.

—— 1916 F

Hipparion-like horses of the Pacific coast and Great Basin provinces (abstract).

Bull. Geol. Soc. Amer., xxvii, 171.

—— 1916 G

Note on a tooth of *Merychippus* from Florida.

Rep. Florida Geol. Surv., viii, 88.

—— 1917 A

Relationships of Pliocene mammalian faunas from the Pacific coast and Great Basin provinces of North America.

Bull. Dept. Geol. Univ. Calif., x, 421-443, 1 text-fig.

—— 1917 B

Felidæ of Rancho La Brea.

Bull. Geol. Soc. Amer., xxviii, 211 (Abstract).

—— 1918 A

New Mammalia from the Idaho formation.

Bull. Dept. Geol. Univ. Calif., x, 523-530, 5 text-figs.

Abstract in Bull. Geol. Soc. Amer., xxix, 162.

—— 1918 B

Note on the systematic position of the wolves of the *Canis dirus* group.

Bull. Dept. Geol. Univ. Calif., x, 531-533.

Abstract in Geol. Zentralbl., xxix, 473.

—— 1918 C

New puma-like cat from Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., x, 535-537, 2 text-figs.

Abstract in Geol. Zentralbl., xxix, 473.

Merriam, John C.—Continued 1918 D

Evidence of mammalian palæontology relating to the age of Lake Lahontan.

Bull. Dept. Geol. Univ. Calif., x, 517-521.

—— 1919 A

Tertiary mammalian faunas of the Mohave desert.

Bull. Dept. Geol. Univ. Calif., xi, 437a-437e; 438-585, 253 text-figs.

Abstracts in Rev. Géol. et Sci. conn., iv, 1923, 107-108; Geol. Zentralbl., xxx, 20-22.

Reviews in Amer. Jour. Sci. (4), xlviii, 399; Rev. crit. Paléozool., xxvii, 25.

—— 1921 A

An outline of progress in palæontological research on the Pacific coast.

Bull. Dept. Geol. Univ. Calif., xii, 237-266.

The list of publications cited occupies pages 254-266.

—— 1921 B

Origin and history of the bear family in the western hemisphere, with particular reference to the relation of this question to problems of geographical history.

Proc. Nat. Acad. Sci., vii, 183-185.

—— 1922 A

Report of John C. Merriam and associates on palæontological researches.

Publ. Carnegie Instn. Wash. Year Book No. 20, for 1921, 447-451.

—— 1923 A

Continuation of palæontological researches.

Publ. Carnegie Instn. Wash. Year Book No. 21, 398-400.

—— 1924 A

Continuation of palæontological researches.

Publ. Carnegie Instn. Wash. Year Book No. 22, 351-353.

—— 1924 B

Present status of investigation concerning antiquity of man in California.

Science (n.s.), lx, 1-2.

Abstract in Science (n.s.), cxiv, 204.

—— 1927 A

The cave of the magic pool.

Scribner's Mag., lxxxii, Sept., 264-272, 7 illustrations.

Merriam, John C., and Harold C. **Bryant** 1911 A

Notes on the dentition of *Omphalosaurus*.

Bull. Dept. Geol. Univ. Calif., VI, 329-332, 2 text-figs.

See Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 476, for brief notice.

Abstract in Sci. Progress, VI, 575.

Review in Rev. crit. Paléozool., XVI, 151.

——, and J. P. **Buwalda** 1917 A

Age of strata referred to the Ellensburg formation in the White Bluffs of the Columbia River.

Bull. Dept. Geol. Univ. Calif., X, 255-266, pl. xiii.

——, and C. L. **Camp** 1916 A

Recent studies on skull structure of *Thalattosaurus*.

Bull. Geol. Soc. Amer., XXVII, 171 (Abstract).

——, and Robert W. **Pack** 1913 A

Suggested paleontological correlation between continental Miocene deposits of the Mohave region and marine Tertiary beds of San Joaquin Valley, California.

Bull. Geol. Soc. Amer., XXIV, 128 (Abstract).

——, and W. J. **Sinclair** 1903 A

The correlation of the John Day and the Mascall.

Jour. Geol., XI, 95-96.

Brief notice in Geol. Centralbl., IX, 653.

—— —— 1907 A

Tertiary faunas of the John Day region.

Bull. Dept. Geol. Univ. Calif., V, 171-205.

Abstracts in Geol. Centralbl., XI, 419; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 128-130.

——, and Chester **Stock** 1921 A

Occurrence of Pleistocene vertebrates in an asphalt deposit near McKittrick, California.

Science (n.s.), LIV, 566-567.

—— —— 1921 B

Notes on the peccary remains from Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., XIII, 9-17, figs. 1-8.

Abstract in Geol. Zentralbl., XXIX, 446.

—— —— 1925 A

Relationships and structure of the short-faced bear, *Arctotherium*, from the Pleistocene.

Publ. Carnegie Instn. Wash., No. 347, art. 1, 1-35, pls. i-x, 6 text-figs.

The bibliography presents 40 titles.

Merriam, John C., and Chester **Stock**—Continued 1925 B

A llama from the Pleistocene of McKittrick, California.

Publ. Carnegie Instn. Wash., No. 347, 38-44, 4 figs.

—— —— 1927 A

A hyænarctid bear from the later Tertiary of the John Day basin of Oregon.

Publ. Carnegie Instn. Wash., No. 346, 39-44, 1 pl.

—— ——, and C. L. **Moody** 1916 A

An American Pliocene bear.

Bull. Dept. Geol. Univ. Calif., X, 87-109, 23 figs.

Abstracts in Rev. crit. Paléozool., XXI, 87; Geol. Zentralbl., XXIX, 446.

—— —— —— 1925 A

The Pliocene Rattlesnake formation and fauna of eastern Oregon, with notes on the geology of the Rattlesnake and Mascall deposits.

Publ. Carnegie Instn. Wash., No. 347, 43-92, figs. 1-45.

Merrill, George P. 1907 A

Catalogue of the types, cotypes, and figured specimens of fossil vertebrates in the department of geology, U. S. National Museum.

Bull. U. S. Nat. Mus., LIII, pt. 2, i-v+1-81.

Metcalf, Maynard M. 1904 A

Seals and sea-lions ingesting pebbles.

Science (n.s.), XX, 722.

—— 1923 A

The origin and distribution of the Anura.

Amer. Naturalist, LVII, 385-411, 15 distribution maps.

19 titles are listed in the bibliography.

Mettam, A. E. 1894 A

The os pedis in ungulates.

Nature, XLIX, 341.

Meunier, Stanislas 1903 A

Le rôle des êtres vivants dans la physiologie générale de la terre.

Rev. Scient. Paris (4), XX, 769-779.

Meyer, Georg Herrmann 1847 A

Ueber den Bau der Haut von *Dasypus* und der Stacheln von *Raja*.

Mitt. naturf. Ges. Zurich, I, 87-92, 1 fig.

Meyer, Hermann v. 1840 B

[On proboscideans in Mexico.]

Neues Jahrb. Min. Geogn. Geol., 1840, 581.

Meyer, Hermann v.—Continued 1842 A
Labyrinthodonten-Genera.
Neues Jahrb. Min. Geogn. Geol., 1842, 301-304.

—— 1845 C
System der fossilen Saurier.
Neues Jahrb. Min. Geogn. Geol., 1845, 278-285.

—— 1847 B
On the *Pterodactylus* (*Rhamphorhynchus*) *gemmingi* from the Calcareous slates of Solenhofen.
Quart. Jour. Geol. Soc., III, part 2, 72-74.

—— 1860 E
Salamandrinen aus der Braunkohle am Rhein und in Böhmen.
Palaeontogr., VII, 47-73, pls. viii, ix.

—— 1860 F
Frösche aus Tertiär-Gebilden Deutschlands.
Palaeontogr., VII, 123-182, pls. xvi-xxii.

—— 1865 A
Der Schädel von *Glyptodon.*
Palaeontogr., XIV, 1-18, pls. i-vii.
Abstract in Zeitschr. gesammt. Naturw., XXV, 461.

—— 1867 C
Über Mastodon.
Neues Jahrb. Min. Geol. Pal., 1867, 785-794.

Meyers, —— 1868 A
[Finding of bones of a mastodon in Noble County, Indiana.]
Amer. Naturalist, II, 56.

Miall, L. C. 1872 A
On the structure of the ganoid fishes.
Proc. Yorksh. Geol. Polyt. Soc. (n.s.), VI, 24-45.

—— 1874 C
On the remains of Labyrinthodonta from the Keuper Sandstone of Warwick preserved in the Warwick Museum.
Quart. Jour. Geol. Soc., XXX, 417-435, pls. xxvi-xxviii.

—— 1875 D
Ctenodus cristatus.
Ann. Mag. Nat. Hist. (4), XV, 436.

Michahelles, —— 1833 A
Zur Geschichte der *Alca impennis.*
Isis von Oken, 1833, 648-651.

Michelsson, Gustav 1922 A
Das Chondrocranium des Igels (*Erinaceus europæus*).
Zeitschr. Anat. Entwicklungsges., Abt. I, LXV, 508-543, 4 figs.
The bibliography presents 26 titles.

Middendorff, Alexander Theodor 1867 A
Reise in den äussersten Norden und Osten Sibiriens.
St. Petersburg, 8vo., IV, pt. 1, i-xiii+1-783+i-lviii.
Pages 271-294 are devoted to a discussion of the mammoth of Siberia.

Middleton, J. 1844 A
Comparative analysis of recent and fossil bones.
Edinb. New Philos. Jour., XXXVII, 285-288.
Reprinted from Philos. Magazine, No. 164, page 14.

Miklouho-Maclay, N. 1879 A
Anatomical remarks on the dentition of the Heterondonti and on the external organs of the male *Heterodontus phillipi.*
Proc. Linn. Soc. N. S. Wales, III, 320-334, pls. xxii-xxvi.

——, and W. **Macleay** 1879 A
Plagiostmata of the Pacific.
Proc. Linn. Soc. N. S. Wales, III, 306-317; pls. xxii-xxvi.

Miller, A. M. 1916 A
Some historic fish remains [from Vanceburg, Ky.].
Science (n.s.), XLIV, 71-72.

Miller, Benjamin Leroy 1911 A
Report on the physical features of Prince George's County.
Maryland Geol. Surv., Prince Georges Co., 24-150, pls. i-xiii, 3 figs.
A bibliography occupies pages 33-68.

—— 1912 A
Description of the Choptank [Maryland] quadrangle.
Folio U. S. Geol. Surv., CLXXXII, 1-8, 2 maps, 3 text-figs.

——. See **Shattuck, Miller,** and **Bibbins.**

——, and L. W. **Stephenson** 1912 A
Bibliography [of the Coastal Plain of North Carolina].
N. Carolina Geol. Econ. Surv., III, 44-73.

Miller, Gerrit S. 1895 A
The long-tailed shrews of the eastern United States.
N. A. Fauna, No. x, 34-56, pls. iv-vi.

—— 1902 A
The technical name of the Virginia deer.
Proc. Biol. Soc. Wash., XV, 39.

—— 1907 A
The families and genera of bats.
Bull. U. S. Nat. Mus., LVII, i-xvii+1-282 pages, pls. i-xv, 49 text-figs.

Miller, Gerrit S.—Continued 1912 A

Catalogue of the mammals of western Europe (Europe exclusive of Russia) in the collection of the British Museum.

London: Printed by order of the trustees of the British Museum, i-xv+1-1019 pages, 213 text-figs.

—— 1912 B

List of North American land mammals in the United States National Museum.

Bull. U. S. Nat. Mus., LXXIX, i-xv+1-455 pages.

Reviewed in Science (n.s.), XVIII, 453-454.

—— 1912 C

The names of the large wolves of northern and western North America.

Smithson. Misc. Coll., LIX, No. 15, 1-5.

—— 1912 D

The names of two North American wolves.

Proc. Biol. Soc. Wash., XXV, 95.

—— 1920 A

Conflicting views on the problem of man's ancestry.

Amer. Jour. Phys. Anthrop., III, 213-245, 3 figs.

—— 1920 B

Review of Joleaud, L. (1919 A) on migrations of mammals.

Jour. Mamm., I, 190-192.

—— 1923 A

The telescoping of the cetacean skull.

Smithson. Misc. Coll., LXXVI, art. 5, 1-70, 8 pls.

—— 1923 B

Remarks on *Hesperopithecus*.

Bull. Amer. Mus. Nat. Hist., XLVIII, 510, 513-514, 517, 520, 527.

—— 1924 A

A second instance of the development of rodent-like incisors in an artiodactyl.

Proc. U. S. Nat. Mus., LXVI, art. 8, 1-4.

—— 1924 B

A pollack whale from Florida, presented to the National Museum by the Miami Aquarium Association.

Proc. U. S. Nat. Mus., LXVI, art. 9, 1-15, pls. i-xxii.

—— 1924 C

List of North American recent mammals.

Government Printing Office, Washington, 8vo., i-xvi+1-673 pages.

Miller, Gerrit S.—Continued 1927 A

Revised determinations of some Tertiary mammals from Mongolia.

Palaeont. Sinica, V, fasc. 2, 5-20.

——, and J. W. **Gidley** 1918 A

Synopsis of the supergeneric groups of rodents.

Jour. Wash. Acad. Sci., VIII, 431-448.

—— —— 1920 A

A new fossil rodent from the Oligocene of South Dakota.

Jour. Mamm., I, 73-74.

Miller, Hugh 1851 A

On certain extraordinary peculiarities of structure in the more ancient ganoids.

Rep. Brit. Assoc. Adv. Sci., XX, 1850 (1851), 91-93.

—— 1857 A

The testimony of the rocks: or geology in its bearings on the two theologies, natural and revealed.

Boston, 8vo., i-xiv+5-502 pages, 152 figs.

Miller, John 1869 A

The so-called hyoid plate of *Asterolepis*.

Geol. Mag., VI, 384.

Miller, Loye Holmes 1909 A

Pavo californicus, a fossil peacock from the Quaternary asphalt-beds of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., V, 285-289, pl. XXV.

Abstracts in Rev. crit. Paléozool., XIV, 13; Sci. Progress, IV, 666.

—— 1909 B

Teratornis, a new avian genus from Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., V, 305-317, 11 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 314; Geol. Centralbl., XIV, 340; Rev. crit. Paléozool., XIV, 12; Amer. Jour. Sci. (4), XXVIII, 501-502; Sci. Progress, IV, 667.

—— 1910 A

Wading birds from the Quaternary asphalt beds of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., V, 439-448, 8 text-figs.

Abstracts in Geol. Centralbl., XV, 651; Sci. Progress, V, 675; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 314; Rev. crit. Paléozool., XV, 146.

Miller, Loye Holmes—Cont'd 1910 B

The condor-like vultures of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VI, 1-19, text-figs. 1-5.

Abstracts in Geol. Centralbl., XVII, 40; Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 313; Rev. crit. Palézool., XV, 146.

—— 1910 C

Fossil birds from the Quaternary of southern California.

Condor, XII, 12-15.

—— 1911 A

Additions to the avifauna of the Pleistocene deposits at Fossil Lake, Oregon.

Bull. Dept. Geol. Univ. Calif., VI, 79-87, 3 text-figs.

Brief abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 475; Geol. Centralbl., XVII, 335; Rev. crit. Paléozool., XV, 146.

—— 1911 B

A series of eagle tarsi from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VI, 305-316, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 475; Geol. Centralbl., XVIII, 670; Sci. Progress, VI, 565.

Review in Rev. crit. Paléozool., XVI, 86.

—— 1911 C

Avifauna of the Pleistocene cave deposits of California.

Bull. Dept. Geol. Univ. Calif., VI, 385-400, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 475; Geol. Centralbl., XVIII, 669.

—— 1911 D

A synopsis of our knowledge concerning the fossil birds of the Pacific Coast of North America.

Condor, XIII, 117-118.

—— 1912 A

Contributions to avian palæontology from the Pacific Coast of North America.

Bull. Dept. Geol. Univ. Calif., VII, 61-115.

—— 1913 A

Contributions to avian palæontology from the Pacific coast of North America.

Bull. Geol. Soc. Amer., XXIV, 132 (Abstract).

Miller, Loye Holmes—Cont'd 1914 A

Bird remains from the Pleistocene of San Pedro, California.

Bull. Dept. Geol. Univ. Calif., VIII, 31-38.

Abstracts in Rev. crit. Paléozool., XIX, 11; Geol. Zentralbl., XXI, 621; XXIX, 476.

—— 1915 A

A walking eagle from Rancho La Brea.

Condor, XVII, 179-181, 1 fig.

Describes *Morphnus daggetti.*

—— 1915 B

The fauna of California.

Z. S. Eldredge's *History of California,* vol. V, 51-76.

—— 1916 A

A review of the species *Pavo californicus.*

Bull. Dept. Geol. Univ. Calif., IX, 89-96, 2 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 55; Geol. Zentralbl., XXIX, 476; Geol. Mag. (6), III. 283.

—— 1916 B

The owl remains from Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., IX, 97-104, 1 text-fig.

Abstracts in Rev. crit. Paléozool., XXI, 88; Geol. Zentralbl., XXIX, 476.

—— 1916 C

Two vulturid raptors from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., IX, 105-109, 2 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 56; Geol. Zentralbl., XXIX, 476. In Aquila, XXIII, 382-385, 583-586; nine of Miller's papers are noted and lists of his species are given.

—— 1916 D

Bird remains collected in the Cedar Mountain region of western Nevada.

Bull. Dept. Geol. Univ. Calif., IX, 173.

—— 1916 E

Review of the Pleistocene species *Pavo californicus.* (Abstract.)

Bull. Geol. Soc. Amer., XXVII, 171.

—— 1919 A

The walking eagle of California.

Overland Monthly (2), LXXII, 427-429.

—— 1921 A

Bird remains from asphalt deposit at McKittrick, California.

Science (n.s.), LIV, 567.

—— 1921 B

Asphalt beds of Rancho La Brea.

Jour. Wash. Acad. Sci., XI, 262-263.

Miller, Loye Holmes—Cont'd 1921 C
Synopsis of California's fossil birds.
Condor, XXIII, 129-130.

—— 1922 A
Fossil birds from the Pleistocene of McKittrick.
Condor, XXIV, 122-125.
Abstract in Geol. Zentralbl., XXXIII, 92.

—— 1923 A
California's ancient bird life.
Univ. Calif. Chronicle, July 1923, 345-355.

—— 1924 A
Anomalies in the distribution of fossil gulls.
Condor, XXVI, 173-174.

—— 1924 B
Branta dickeyi from the McKittrick Pleistocene.
Condor, XXVI, 178-180, 4 figs.

—— 1925 A
Avifauna of the McKittrick Pleistocene.
Bull. Dept. Geol. Univ. Calif., XV, 307-326, 2 figs.

—— 1925 B
The birds of Rancho La Brea.
Publ. Carnegie Instn. Wash. No. 349, art. 5, 63-106, pls. i-vi, 18 text-figs.

—— 1925 C
Avian remains from the Miocene of Lompoc, California.
Publ. Carnegie Instn. Wash. No. 349, 107-117, pls. i-ix, 1 text-fig.

—— 1927 A
Bird remains [at Carpinteria, Calif.].
Science (n.s.), LXVI, 156.

—— 1928 A
The antiquity of the migratory instinct in birds.
Condor, XXX, 119-120.

Miller, Newton 1909 A
The American toad (*Bufo lentiginosus americanus* LeConte). A study in dynamic biology.
Amer. Naturalist, XLIII, 641-668, 730-745, 6 text-figs.

Miller, Robert C. 1923 A
A study of the flight of sea gulls.
Condor., XXV, 5-15, 13 figs.
The bibliography presents 10 titles.

Miller, S. A. 1889 A
See Hay, O. P., 1902 A, p. 90.
Reviewed in Ann. Mag. Nat. Hist. (6), V, 339-340.

Miller, Sylvanus 1801 A
Account of large bones dug up in Orange County (State of New York).
Med. Reposit. N. Y., IV, 211-213.
Letter to Dr. S. Mitchill, dated Sept. 20, 1800.

Miller, W. D., and W. **Dieck** 1900 A
Ueber den Bau der Molaren von *Elephas indicus.*
Deutsche Monatsschr. Zahnheilk., XVIII, 385-390, 4 figs.

Milne, John Adam 1913 A
Pacific salmon: An attempt to evolve something of their history from an examination of their scales.
Proc. Zool. Soc. Lond., 1913, 572-610, text-figs. 95-118.

Milne-Edwards, A. See **Edwards,** Milne.

Miner, Roy Waldo 1925 A
The pectoral limb of *Eryops* and other primitive tetrapods.
Bull. Amer. Mus. Nat. Hist., LI, 145-312, 104 figs.
In the bibliography are recorded 117 titles.

See **Gregory, Miner,** and **Noble.**

Miram, F. 1841 A
Nachtrag zu meinem Aufsatze: Ueber den eigenthümlichen Bau des Gehörganges bei einigen Säugethieren aus der Ordnung der Nager.
Bull. Soc. Natural., Moscou, 1841, 541-543.

Missuna, A. 1908 A
Ueber eine neue *Edestus*-Art aus den Karbon-Ablagerungen der Umgebungen von Kolomna.
Bull. Soc. Natural., Moscou (n.s.), XXI, 529-535, 4 text-figs.

Mitchell, Elisha 1828 A
On the character and origin of the low country of North Carolina.
Amer. Jour. Sci. (1), XIII, 336-347.

Mitchell, Hugh 1863 A
Restoration of *Pteraspis.*
Geologist, VI, 31.

Mitchell, P. Chalmers 1894 A
The bird's foot.
Nat. Sci., V, 211-213.

—— 1905 A
On the intestinal tract of mammals.
Trans. Zool. Soc. Lond., XVII, 437-536, 50 text-figs.
The bibliography comprises 27 titles. A paper of value as showing relationships of groups.

Mitchell, P. Chalmers—Cont'd 1915 A
Anatomical notes on the gruiform birds, *Aramus giganteus* and *Rhinochetus kagu.*
Proc. Zool. Soc. Lond., 1915, 413-423, 5 figs.

—— 1920 A
Discussion on the zoological position and affinities of *Tarsius.*
Proc. Zool. Soc. Lond., 1919 (1920), 496-497.

Mitchell, W. 1904 A
Some illustrations of the dentition of the elephant. Normal and pathological.
Brit. Dental Jour., xxv, 284-296, 34 figs.

Mitchill, Samuel L. 1815 A
The fishes of New York, described and arranged.
Trans. Lit. and Philos. Soc. N. Y., I, 355-501, pls. i-vi.

—— 1817 A
Another mammoth found.
Tilloch's Philos. Mag. and Jour., L, 392.
Extract in Bull. Soc. Philom. Paris, 1817, 98.
The "mammoth" was evidently a mastodon.

—— 1821 A
Sur les restes fossiles d'un mastodonte trouvés à Chester, dans le Wallkill.
Jour. Phys. Chim. Hist. nat., xcii, 291-295, pl. figs. 14-17.
Extract from Mitchill's-Cuvier's *"Theory of the Earth."*

—— 1826 A
Catalogue of the organic remains and other geological and mineralogical articles contained in the collection presented to the New York Lyceum of Natural History.
New York, 8vo., 1-40 pages.

—— 1832 A
Über kürzlich entdeckte Zähne vom *Megatherium.*
Isis von Oken, xxv, 905-906.
An abstract of Mitchill, S., 1824 A.

——, and P. S. **Townsend** 1909 A
[Report on Chester, N. Y., mastodon.]
Ann. N. Y. Acad. Sci., xviii, pages v, vi.
Reprinted from the Amer. Month. Mag. Crit. Rev., I, 1817, 195-196.

Mivart, St. G. 1868 A
Notes on the osteology of the Insectivora.
Jour. Anat. Physiol. Lond., II, 116-154, text-figs.
A continuation of Mivart St. G., 1867 C. For abstract see Gill, T., 1875 A, p. 99.

—— 1871 B
On the vertebrate skeleton.
Trans. Linn. Soc. Lond., xxvii, 369-392, pl. liii.

—— 1874 B
Man and apes. An exposition of structural resemblances and differences bearing upon questions of affinity and origin.
New York, i-vii+1-200 pages, 61 figs.

—— 1878 B
The genesis of limbs.
Nature, xviii, 282-284, 309-311, 331-334, 17 figs.

—— 1879 B
Tails.
Nature, xx, 509-512, 537-540, 10 figs.

—— 1882 B
Notes on some points in the anatomy of the Aeluroidea.
Proc. Zool. Soc. Lond., 1882, 459-520, 12 text-figs.

—— 1888 A
On the possibly dual origin of the Mammalia.
Proc. Roy. Soc. Lond., xliii, 372-379.

—— 1895 A
On the hyoid bone of certain parrots.
Proc. Zool. Soc. Lond., 1895, 162-174, 6 figs.

——, and Robert **Clarke** 1879 A
On the sacral plexus and sacral vertebræ of lizards and other Vertebrata.
Trans. Linn. Soc. Lond. (2), I, 513-532, pls. lxvi, lxvii, 9 text-figs.

Miyawaki, Katsuichi 1925 A
Über die Entwicklung des Klauenbeins der Schafembryon.
Anat. Anz., lix, 177-196, 5 figs.
The bibliography presents 30 titles.

Mochi, Aldobrandino 1908 A
Variazioni della squama del temporale e della sutura squamosa.
Arch. Antropol. Etnol., xxxviii, 181-188, pl. iv.

Moffit, Fred H. 1905 A

Fairhaven gold placers, Seward Peninsula, Alaska.

Bull. U. S. Geol. Surv., CCXLVII, 1-85, pls. i-xi, 2 text-figs.

See pages 41-42 for notice of mammalian remains.

Molin, Raffaele 1851 A

Sullo scheletro dell'*Acipenser ruthenus.*

Sitz.-Ber. Akad. Wiss. Wien, VII, 357-378, pl. xv.

Mollier, S. 1895 B

Ueber die Entwicklung der fünfzehigen Extremität.

Sitz.-Ber. Ges. Morphol. Physiol. München, X, 1-17, 17 figs.

—— 1897 A

Die paarigen Extremitäten der Wirbeltiere. III: Die Entwicklung der paarigen Flossen des Störs.

Anat. Hefte, Arb., VIII, 1-74, pls. i-x, 17 text-figs.

The bibliography presents titles of 31 papers.

Mollison, Theodor 1924 A

Neuere Funde und Untersuchungen fossiler Menschenaffen und Menschen.

Zeitschr. gesamte Anat. Ergeb., XXV, 696-771, 22 figs.

The bibliography (pages 696-701) comprises 151 titles.

Mollison, Thomas 1910 A

Die Körperproportionen der Primaten.

Morphol. Jahrb. XLII, 79-304, 91 text-figs. and tables.

Montagu, Ivor 1924 A

On the remains of fen beaver in the Sedgwick Museum.

Proc. Zool. Soc. Lond., 1924, 1081-1086, pls. i-iii.

Montgomery, T. H. 1901 A

Missing links.

Scient. Amer. Suppl., LIII, 21732-21734.

—— 1904 A

A list of the types of fossil vertebrates in the Museum of the University of Texas.

Biol. Bull., VIII, 56-58.

Moodie, R. L. 1907 A

The sacrum of the Lacertilia.

Biol. Bull., XIII, 84-93, 1 fig.

The author refers to the writings of 25 authors.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 161.

Moodie, R. L.—Continued 1908 A

Dissorophus—a correction.

Science (n.s.), XXVII, 30, 31.

—— 1908 B

The ancestry of the caudate Amphibia.

Amer. Naturalist, XLII, 361-373, 10 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 136; Nature, LXXVIII, 375.

—— 1908 C

The relationship of the turtles and plesiosaurs.

Kansas Univ. Sci. Bull., IV, 319-327, 2 text-figs.

Abstracts in Geol. Centralbl., XIII, 204; Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 442; Rev. crit. Paléozool., 13, 155.

—— 1908 D

Reptilian epiphyses.

Amer. Jour. Anat., VII, 443-467, 24 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 442; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 119, 158; Sci. Progress, III, 466.

—— 1908 E

The dawn of quadrupeds in North America.

Pop. Sci. Month., LXXII, 558-566, 5 figs.

—— 1908 F

The clasping organs of extinct and recent Amphibia.

Biol. Bull., XIV, 249-259, 5 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 137.

—— 1908 G

The lateral line system in extinct Amphibia.

Jour. Morphol., XIX, 511-540, 17 figs.

The bibliography has 32 titles. Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 135-136; Sci. Progress, III, 469.

—— 1908 H

Evolution of mammalian molar teeth to and from the triangular type.

Anat. Record, III, 221-225.

Review of Osborn, 1907 G.

—— 1909 A

New or little known forms of Carboniferous Amphibia in the American Museum of Natural History.

Bull. Amer. Mus. Nat. Hist., XXVI, 347-357, pls. lviii-lxv, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 468; Geol. Centralbl., XVI, 59-60.

Moodie, R. L.—Continued 1909 B

Carboniferous air-breathing vertebrates of the United States National Museum.

Proc. U. S. Nat. Mus., XXXVII, 11-28, pls. iv-x.

Abstracts in Amer. Jour. Sci. (4), XXIX, 88; Neues Jahrb. Min. Geol. Pal., 1910, II, 468-469; Nature, London, LXXXI, 525; Rev. crit. Paléozool., XIV, 15-16; Amer. Jour. Sci. (4), XXIX, 88; Sci. Progress, IV, 672.

—— 1909 C

Vertebrate paleontology.

Amer. Naturalist, XLIII, 116-124.

Notes on various groups.

—— 1909 D

The Carboniferous quadrupeds. Those of Kansas, Ohio, Illinois, and Pennsylvania in their relation to the classification of the so-called Amphibia and Stegocephala.

Trans. Kansas Acad. Sci., XXII, 239-247, pls. i-iii.

See **Moodie**, R. L., 1911 H.

—— 1909 E

A contribution to a monograph of the extinct Amphibia of North America. New forms from the Carboniferous.

Jour. Geol., XVII, 38-82, 24 text-figs.

Abstracts in Geol. Centralbl., XIII, 203; Sci. Progress, IV, 672; Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 132-134.

—— 1909 F

The Microsauria, ancestors of the Reptilia.

Geol. Mag. (5), VI, 216-220, 1 text-fig.

Abstracts in Geol. Centralbl., XIII, 396; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 469; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 158.

—— 1909 G

The morphology of the vertebrate sacral rib.

Anat. Anz., XXXIV, 361-364.

Abstract in Jahresber. Anat. Entwickl. (N. F.), XV, pt. 3, 109.

—— 1910 A

The alimentary canal of a Carboniferous salamander.

Amer. Naturalist, XLIV, 367-375, 4 text-figs.

Abstracts in Geol. Centralbl., XVII, 43; Sci. Progress, V, 688; Nature, LXXXIV, 17.

—— 1910 B

A new labyrinthodont from Kansas.

Science (n.s.), XXXII, 721.

Moodie, R. L.—Continued 1910 C

The Amphibia of the Mazon Creek shales.

Science (n.s.), XXXI, 233-234.

—— 1911 A

A new labyrinthodont from the Kansas Coal Measures.

Proc. U. S. Nat. Mus., XXXIX, 489-495, 4 text-figs.

Abstracts in Geol. Centralbl., XVII, 43; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 155; Rev. crit. Paléozool., XV, 153; Sci. Progress, VI, 579; Geol. Mag. (5), IX, 178.

—— 1911 B

Two amphibians, one of them new, from the Carboniferous of Illinois.

Proc. U. S. Nat. Mus., XL, 429-433, 2 text-figs.

Abstracts in Geol. Centralbl., XVII, 42; Sci. Progress, VI, 580.

—— 1911 C

Recent contributions to a knowledge of the extinct Amphibia.

Amer. Naturalist, XLV, 375-384.

—— 1911 D

An embryonic plesiosaurian propodial.

Trans. Kansas Acad. Sci., XXIII, 95-101, pl. i, 9 text-figs.

—— 1911 E

The temnospondylous Amphibia, and a new species of *Eryops* from the Permian of Oklahoma.

Kansas Univ. Sci. Bull., V, 235-253, pls. xlix-liv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 150; Rev. crit. Paléozool., XVII, 78.

—— 1911 F

An armored dinosaur from the Cretaceous of Wyoming.

Kansas Univ. Sci. Bull., V, 257-273, pls. lv-lix, 1 text-fig.

Appended is a bibliography of 29 titles. Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 146; Rev. crit. Paléozool., XVII, 76.

—— 1911 G

A contribution to the soft anatomy of Cretaceous fishes and a new primitive herring-like fish from the Texas Cretaceous.

Kansas Univ. Sci. Bull., V, 277-287, pls. lx-lxii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 353; Rev. crit. Paléozool., XVII, 84.

Moodie, R. L.—Continued 1911 H

The Carboniferous quadrupeds. Those of Kansas, Ohio, Illinois, and Pennsylvania in their relation to the classification of the so-called Amphibia and Stegocephala.

Trans. Kansas Acad. Sci., 1911, 239-247.
Imprint, 1908. Received at U. S. Nat. Museum, Nov. 4, 1911.

——— 1912 A

The Mazon Creek, Illinois, shales and their amphibian fauna.

Amer. Jour. Sci. (4), xxxiv, 277-285, 4 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, i, Ref., 527; Geol. Centralbl., xix, 559; Rev. crit. Paléozool., xvii, 78.

——— 1912 B

An American Jurassic frog.

Amer. Jour. Sci. (4), xxxiv, 286-288.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, i, Ref., 527; Geol. Centralbl., xix, 567; Sci. Progress, viii, 19; Rev. crit. Paléozool., xvii, 78; Nature, xc, 139, 599.

——— 1912 C

The "stomach stones" of reptiles.

Science (n.s), xxxv, 377-378.

——— 1912 D

The Pennsylvanic Amphibia of the Mazon Creek, Illinois, shales.

Kansas Univ. Sci. Bull., vi, 323-359, pls. i-xiv.
Abstract in Geol. Zentralbl., xxi, 39.

——— 1912 E

The skull structure of *Diplocaulus magnicornis* Cope and the amphibian order Diplocaulia.

Jour. Morphol., xxiii, 31-39, pls. i, ii.
There is a bibliography of 18 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1912, ii, Ref., 150-151.

——— 1913 A

Some recent advances in vertebrate palæontology.

Amer. Naturalist, xlvii, 183-192, 248-256.

——— 1913 B

Vertebrate footprints in the Lower Permian of Kansas.

Amer. Jour. Sci. (4), xxxv, 31-33, 1 fig.
Abstract in Geol. Centralbl., xx, 146.
No name is given to these footprints.

——— 1914 A

A list of the described species of fossil Amphibia.

Kansas Univ. Sci. Bull., ix, 13-28.

——— 1914 B

The fossil frogs of North America.

Amer. Jour. Sci. (4), xxxviii, 531-536, 2 text-figs.

Moodie, R. L.—Continued 1915 A

A Coal Measures amphibian with an osseous tarsus.

Amer. Jour. Sci. (4), xxxix, 509-512, 2 text-figs.
Abstracts in Rev. crit. Paléozool., xxiv, 87; Geol. Zentralbl., xxv, 468.

——— 1915 B

Some methods of studying fossil Amphibia embedded in coal.

Kansas Univ. Sci. Bull., ix, 187-193, pl. L, 3 text-figs.

——— 1915 C

A remarkable microsaur from the Coal Measures of Ohio.

Science (n.s.), xli, 34-35.
Abstract in Rev. Géol. et Sci. conn., iv, 1923, 109.
Review in Rev. crit. Paléozool., xxvii, 26.

——— 1915 D

A sphenoidal sinus in the dinosaurs.

Science (n.s.), xli, 288-289.
Abstract in Rev. Géol. et Sci. conn., iv, 1923, 109.
Review in Rev. crit. Paléozool., xxvii, 27.

——— 1915 E

The scaled Amphibia of the Coal Measures.

Science (n.s.), xli, 463-464.

——— 1915 F

The migrations and geographic distribution of the fossil Amphibia.

Amer. Jour. Sci. (4), xl, 186-190, 1 map.

——— 1915 G

Some recent studies on fossil Amphibia.

Amer. Naturalist, xlix, 369-376.
Appended is a bibliography of 16 titles.

——— 1915 H

The Coal Measures Amphibia and the Crossoptergia.

Amer. Naturalist, xlix, 637-644.
There is a bibliography of 12 titles.
Abstract in Geol. Mag. (6), iii, 35.

——— 1915 I

A new fish brain from the Coal Measures of Kansas, with a review of other fossil brains.

Jour. Comp. Neur., xxv, 135-181, 19 figs.
The bibliography presents titles of 50 papers.

——— 1915 J

A further contribution to a knowledge of the lateral line system in extinct Amphibia.

Jour. Comp. Neur., xxv, 317-328, 7 figs.
There is a bibliography of 10 works.

Moodie, R. L.—Continued 1916 A

The Coal Measures Amphibia of North America.

Publ. Carnegie Instn. Wash., No. 238, i-x+1-222 pages, pls. i-xxvi, 43 text-figs.

Pages 202-217 are occupied by a bibliography consisting of 645 titles.

Abstracts in Nature, XCVIII, 356; Amer. Jour. Sci. (4), XLII, 502.

——— 1916 B

Bacteriologic and pathologic evidences in past geologic ages.

Trans. Chicago Pathol. Soc., 1916, 84-88.

——— 1916 C

Two caudal vertebræ of a sauropodous dinosaur exhibiting a pathological lesion.

Amer. Jour. Sci. (4), XLI, 530-531, 1 fig.

Abstract in Geol. Zentralbl., XXV, 181.

——— 1916 B

The structure and growth of the plesiosaurian propodial.

Jour. Morphol., XXVII, 401-410, pl. 1, 6 text-figs.

The bibliography presents 9 titles.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 109-110.

Review in Rev. crit. Paléozool., XXVII, 27.

——— 1916 E

On the sinus paranasales of two early Tertiary mammals.

Jour. Morphol., XXVIII, 135-144, 5 figs.

There is a list of 10 works consulted.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 109.

Review in Rev. crit. Paléozool., XXVII, 27.

——— 1916 F

The growth of bone in Cretaceous times.

Science (n.s.), XLIII, 35-36.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 110.

Review in Rev. crit. Paléozool., XXVII, 28.

——— 1916 G

Mesozoic pathology and bacteriology.

Science (n.s.), XLIII, 425-426.

——— 1917 A

The influence of disease in the extinction of races.

Science (n.s.), XLV, 63-64.

——— 1917 B

Studies in paleopathology. I: General consideration of the evidences of pathological conditions found among fossil animals.

Ann. Med. Hist., 1917, 374-393, 20 figs.

Moodie, R. L.—Continued 1918 A

Review of Osborn's *Equidæ of the Oligocene, Miocene and Pliocene of North America.*

Science (n.s.), XLVIII, 171-172.

——— 1918 B

Opisthotonus and allied phenomena among fossil vertebrates.

Amer. Naturalist, LII, 384-394, 8 figs.

——— 1918 C

Palæontological evidence of the antiquity of disease.

Scient. Monthly, VII, 265-281.

——— 1918 D

Pathological evidences of disease among ancient races of man and extinct animals.

Surg., Gynecol. Obstet., 1918, 498-510, 45 figs.

——— 1918 E

Synthesis of palæontology and medical history.

Science (n.s.), XLVIII, 619-620.

——— 1919 A

Opisthotonus.

Science (n.s.), L, 275-276.

——— 1920 A

Ancient bacteria and the beginning of disease.

Scient. Monthly, XI, 362-364.

——— 1920 B

Evolution's most romantic moment.

Scient. Monthly, XI, 464-469, 5 figs.

——— 1920 C

The nature of the primitive haversian system.

Anat. Record, XIX, 47-50, pl. i.

——— 1920 D

Thread molds and bacteria in the Devonian.

Science (n.s.), LI, 14-15.

——— 1920 E

Concerning the fossilization of blood corpuscles.

Amer. Naturalist, LIV, 460-464, 1 fig.

——— 1920 F

Microscopic examination of a fossil fish brain.

Jour. Comp. Neur., XXXII, 329-333, 2 figs.

The bibliography presents 4 titles.

——— 1921 A

Osteomyelitis in the Permian.

Science (n.s.), LIII, 333.

——— 1922 A

The paleopathology of the parasuchians.

Science (n.s.), LVI, 417.

Moodie, R. L.—Continued 1922 B

The influence of the lateral line system on the peripheral osseous elements of fishes and Amphibia.

Jour. Comp. Neur., XXXIV., 318-335, 5 figs.

The bibliography presents 20 titles.

—— 1922 C

On the endocranial anatomy of some Oligocene and Pleistocene mammals.

Jour. Comp. Neur., XXXIV, 343-371, 25 figs.

Appended is a bibliography of 17 titles.

—— 1923 A

An unusual form of Pliocene pathology.

Amer. Jour. Sci. (5), V, 335-336, 1 fig.

Abstract in Geol. Zentralbl., XXX, 23.

—— 1923 B

Paleopathology. An introduction to the study of ancient evidences of disease.

8vo., 1-567 pages, pls. i-cxvii, figs. 1-49, University Press.

Reviewed in Amer. Jour. Sci. (5), VI, 440-442; Jour. Geol., XXXII, 262.

Abstracts in Rev. crit. Paléozool., XXVIII, 65, 1924; Neues Jahrb. Min. Geol. Pal., 1925, I, 290.

—— 1926 A

Studies in paleopathology. XIII: The elements of the haversian system in normal and pathological structures among fossil vertebrates.

Biol. Gen., II, 63-95, pls. v-xvi, 10 text-figs.

In foot-notes are numerous citations of the literature of the subject.

—— 1926 B

A Cretaceous fish spine.

Amer. Naturalist, LX, 290-293, 2 figs.

—— 1927 A

Vertebral lesions in the sabre-tooth, Pleistocene of California, resembling the so-called *Myositis ossificans progressiva* compared with certain ossifications in the dinosaurs.

Ann. Med. Hist., IX, 91-102, 11 figs.

The bibliography cites 12 articles.

—— 1927 B

Tumors in the Lower Carboniferous.

Science (n.s.), LXVI, 541.

—— 1928 A

The Cephalaspidæ.

Science (n.s.), LXVII, 348-349.

Mook, Charles C. 1914 A

The dorsal vertebræ of *Camarasaurus* Cope.

Bull. Amer. Mus. Nat. Hist., XXXIII, 223-227, 3 text-figs.

Brief abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, 331; Nature, London, XCV, 73; Geol. Zentralbl., XXVIII, 446.

—— 1914 B

Notes on *Camarasaurus* Cope.

Ann. N. Y. Acad. Sci., XXIV, 19-22, 1 text-fig.

Abstracts in Bull. Geol. Soc. Amer., XXV, 143; Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 331.

—— 1915 A

Origin and distribution of the Morrison formation.

Bull. Geol. Soc. Amer., 315-322, 4 text-figs.

—— 1916 A

A study of the Morrison formation.

Ann. N. Y. Acad. Sci., XVII, 39-191, pl. vi.

Presents a list of the vertebrates.

The bibliography occupies pages 172-191.

—— 1917 A

Criteria for the determination of species of the Sauropoda, with description of a new species of *Apatosaurus*.

Bull. Amer. Mus. Nat. Hist., XXXVII, 355-358, 2 text-figs.

Abstract in Geol. Zentralbl., XXVIII, 508

—— 1917 B

The fore and hind limbs of *Diplodocus*.

Bull. Amer. Mus. Nat. Hist., XXXVII, 815-819, figs. 1, 2.

Geol. Zentralbl., XXVIII, 508.

—— 1918 A

The habitat of the sauropod dinosaurs.

Jour. Geol., XXVI, 459-470.

—— 1921 A

Skull characters and affinities of the extinct Florida gavial *Gavialosuchus americana* (Sellards).

Bull. Amer. Mus. Nat. Hist., XLIV, 33-41, pls. v-ix, 1 table.

—— 1921 B

Individual and age variations in the skulls of Recent Crocodilia.

Bull. Amer. Mus. Nat. Hist., XLIV, 51-66, pls. x-xii, 4 figs.

—— 1921 C

Notes on the postcranial skeleton in the Crocodilia.

Bull. Amer. Mus. Nat. Hist., XLIV, 67-100, pls. xiii, xiv, 20 text-figs.

Mook, Charles C.—Continued 1921 D
The dermo-supraoccipital bone in the Crocodilia.
Bull. Amer. Mus. Nat. Hist., XLIV, 101-103, 2 figs.

—— 1921 E
Allognathosuchus, a new genus of Eocene crocodilians.
Bull. Amer. Mus. Nat. Hist., XLIV, 105-116, pl. xv.

—— 1921 F
Description of a skull of a Bridger crocodilian.
Bull. Amer. Mus. Nat. Hist., XLIV, 111-116, pls. xvi, xvii.

—— 1921 G
The skull of *Crocodilus acer* Cope.
Bull. Amer. Mus. Nat. Hist., XLIV, 117-121, pls. xviii, xix.

—— 1921 H
Skull characters of Recent Crocodilia.
Bull. Amer. Mus. Nat. Hist., XLIV, 123-268 14 text-figs.

—— 1923 A
A new species of *Alligator* from the Snake Creek beds.
Amer. Mus. Novit. No. 73, 1-13, 5 figs.
Abstract in Geol. Zentralbl., XXIX, 476.

—— 1923 B
Skull characters of *Alligator sinense* Fauvel.
Bull. Amer. Mus., XLVIII, 553-562, 2 figs.
Abstract in Geol. Zentralbl., XXX, 443-444.

—— 1924 A
Further notes on the skull characters of *Gavialosuchus americana* (Sellards).
Amer. Mus. Novit., No. 155, 1-2, 1 fig.

—— 1925 A
A revision of the Mesozoic Crocodilia of North America.
Bull. Amer. Mus. Nat. Hist., LI, 319-432, pls. iv, v, 63 text-figs.

—— 1927 A
The skull characters of *Crocodilus megarhinus* Andrews.
Amer. Mus. Novit., CCLXXXIX, 1-8, 2 figs.

See also W. K. **Gregory** and C. C. **Mook; Osborn** and **Mook.**

Moore, Clarence 1905 A
Archæological research in the southern United States.
Internat. Congr. Americanists, XIII, New York, 1902, 27-40.

Moreau, Laurent J. 1900 A
L'extinction des espèces animales.
Bull. Soc. Zool. France, XXV, 109-117.

Moreau, Laurent J.—Continued 1914 A
La dent des mammifères de la série paléontologique et la dent de l'homme.
Jour. Anat. Physiol. Paris, 1914, 81-91, 9 figs.

Moreno, F. P. 1902 A
Account of the discovery [of *Neomylodon*].
Pritchard's Through the heart of Patagonia, pages 301-304.

Morgan, T. H. 1903 A
Regeneration of the leg of *Amphiuma means.*
Biol. Bull., V, 293-296, 4 figs.

Morgan, Wm. Conger, and Marion Clover **Tallmon** 1904 A
A fossil egg from Arizona.
Bull. Dept. Geol. Univ. Calif., III, 403-410, pls. xlviii, xlix.
Abstract in Geol. Mag. (5), I, 520.

Mori, Otto 1924 A
Über die Entwicklung des Schädelskelettes des Dornhaies (*Acanthias vulgaris*).
Zeitschr. Anat. Entwicklungsges., LXXIII, 389-430, 14 figs.
6 titles are recorded in the bibliography.

Morita, S. 1912 A
Über die Ursachen der Richtung und Gestalt der thoracalen Dornfortsätze der Säugetierwirbelsäule.
Anat. Anz., XLII, 1-10, 4 text-figs.

Morton, Dudley J. 1924 A
Evolution of the human foot.
Amer. Jour. Phys. Anthrop., VII, 1-52, 25 figs.
The bibliography contains 10 titles.

—— 1926 A
Notes on the footprint of *Thinopus antiquus.*
Amer. Jour. Sci. (5), XII, 409-414, 6 figs.

Much, —— 1900 A
[Remarks on the extinction of diluvial mammals.]
Corresp.-Bl. deutsch. Ges. Anthrop., XXXI, 103.

Mudge, Benjamin F. 1866 B
Geology of Kansas.
Rep. Geol. Surv. Kansas, I, 1-57.

—— 1873 A
Footprints in the middle Coal Measures at Osage in Kansas.
Amer. Jour. Sci. (3), VI, 228.

—— 1875 A
Rare forms of fish in Kansas.
Trans. Kansas Acad. Sci., III, 121-122 (Reprint, 1896).

Mudge, Benjamin F.—Continued 1877 A

Bison latifrons in Kansas.

Trans. Kansas Acad. Sci., v, 10.

This appears to refer to the type of *Bison alleni* Marsh.

—— 1879 A

Are birds derived from dinosaurs?

Kansas City Rev. Sci. Indust., III, 224-226.

Mulder, Claas 1835 A

Over de tanden van den narwal of eenhoorn (*Monodon monoceros* L).

Tijdschr. natuurl. Geschied. Physiol., II, 65-109, pl. ii.

Numerous references to other authors.

Müller, Erik 1909 A

Die Brustflossen der Selachier.

Anat. Hefte, Arb., XXXIX, Abt. i, 469-601, pls. xxvii-xlvi.

Appended is a bibliography of 24 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 142.

Müller, F. 1911 A

Über die Technik des Skelettmessens.

Naturw. Wochenschr. XXVI (N.F., X), 335.

Müller, Johannes 1832 A

Ueber die natürliche Eintheilung der Amphibien.

Isis von Oken, XXV, 504-510.

—— 1841 B

Der Character der fossilen Enaliosauria.

Arch. Anat. Physiol. Med., 1841, cliii-clvi.

A review of Owen, R., 1840 A.

—— 1841 C

Ueber eine eigenthümliche Bewaffnung des Zwischenkiefers der reifen Embryonen der Schlangen und Eidechsen.

Arch. Anat. Physiol. Med., 1841, 329-331, pl. xii.

—— 1845 A

Ueber den Bau und die Grenzen der Ganoiden und über das natürliche System der Fische.

Arch. Naturges, XI, Bd. I, 91-141.

—— 1846 C

Ueber den Bau und die Grenzen der Ganoiden und über das natürliche System der Fische.

Abh. Akad. Wiss. Berlin, 1844, 117-216, pls. i-vi.

See Hay, O. P., 1902 A, 173. Abstracts in Ber. Akad. Wiss. Berlin, 1844, 416-422; Arch. Naturgesch., 1845, I, 91-142; Ann. Sci. Nat., Zool. (3), IV, 5-53; Scient. Mem. (Taylor), IV, 499-542; Atti. Sci. Ital., 1845, 686-713.

This work was issued in 1844.

Müller, Wilh. 1907 A

Zur Entwicklung der Striges und deren Wendezehe.

Zool. Anz., XXXI, 406-436, 13 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 125.

Münster, Georg. (Graf zu) 1831 A

Beschreibung einer neuen Art der Gattung *Pterodactylus* Cuv.; *Ornithocephalus* Sommer.

Nova Acta Acad. Leop. Carol., XV, 49-60.

Mummery, J. Howard 1917 A

On the structure and development of the tubular enamel of the Sparidæ and Labridæ.

Phil. Trans. Roy. Soc. Lond. (B), CCVIII, 251-269, pls. v, vi.

Murchison, Charles 1868 A

Biographical sketch of Hugh Falconer and notes on his Fauna Antiqua Sivalensis.

Palaeontological Memoirs of the late Hugh Falconer, vol. I, i-liii pages, and in notes in vols. I, II.

Murchison, Roderick I. 1841 A

Fishes of the Old Red sandstone.

Rep. Brit. Assoc. Adv. Sci., X, pt. 2, 99.

—— 1843 A

On mastodontoid and megatherioid animals.

Edinb. New Philos. Jour., XXXV, 129-135.

—— 1843 B

Anniversary address of the president.

Proc. Geol. Soc. Lond., IV, 65-151.

Extract in Eager, S. W., 1847 A, 79.

—— 1846 A

Habitation and destruction of the mammoths.

Edinb. New Philos. Jour., XL, 344-361.

—— 1853 A

On some remains of the Bone-bed of the upper Ludlow rock.

Quart. Jour. Geol. Soc., IX, 16-17.

—— 1854 A

Siluria. The history of the oldest known rocks containing organic remains, with a brief sketch of the distribution of gold over the earth.

i-xvii+1-523 pages, pls. i-xxxvii, and many text-figs., 8vo.

Murdoch, John 1885 A

Report of the international polar expedition to Point Barrow, Alaska, under Lieut. P. H. Ray.

Pt. IV, 89-132 (mammals, birds, fishes).

Murdoch, John—Continued 1892 A
Ethnological results of the Point Barrow Expedition.
Bur. Amer. Ethnol., Rep., IX, 4-441, 428 figs.

Murie, J. 1870 B
On *Phoca groenlandica*.
Proc. Zool. Soc. Lond., 1870, 604-608, pl. xxxii.

—— 1871 B
On the systematic position of the *Sivatherium giganteum* of Falconer and Cautley.
Geol. Mag., VIII, 438-448, pls. xii, xiii.

—— 1873 A
On the organization of the caaing whale, *Globiocephalus melas*.
Trans. Zool. Soc. Lond., VIII, 235-301, pls. xxx-xxxviii, 6 text-figs.
This paper is devoted almost wholly to the anatomy of the soft parts.

—— 1880 A
Further observations on the manatee.
Trans. Zool. Soc. Lond., XI, 19-49, pls. v-ix.

Murray, J. A. 1897 A
The vertebral column of certain primitive Urodela: *Spelerpes, Plethodon, Desmognathus*.
Anat. Anz., XIII, 661-664, 3 figs.

Mutel, —— 1921 A
Les aspects particulière de l'architecture du corps vertébral chez les mammifères, bipèdes ou quadrupèdes et chez les mammifères pisciformes.
C. R. Soc. Biol., 1921, II, 521-523.

Mysberg, W. A. 1917 A
Über die Verbindungen zwischen dem Sitzbeine und der Wirbelsäule bei den Säugetieren.
Anat. Hefte Arb., LIV, 641-668, 6 text-figs.
The bibliography cites 17 titles.

Nathorst, A. G. 1901 A
Le loup polaire et le boeuf musqué dans le Grönland oriental.
La Géographie, III, 1-16, 4 figs.
Abstract in Globus, LXXIX, 162-163.

Natural Science 1898 A
Notes and comments.
Nat. Sci., XIII, 157-159, 230, 370-371.

Nauck, E. T. 1923 A
Die Beziehungen zwischen Beckenstellung und Gliedmassenstellung bei tetrapoden Vertebraten.
Morphol. Jahrb., LIII, 1-47, 13 figs.
84 titles are recorded in the bibliography.

Nauck, E. T.—Continued 1926 A
Das Coracoideum der Säuger.
Verh. Anat. Ges., XXXV, 208-213; 260, 4 figs.

—— 1926 B
Beiträge zur Kenntnis des Skeletts der paarigen Gliedmassen der Wirbeltiere.
Morphol. Jahrb., LVI, 22-89, 18 figs.
Appended is a bibliography of 102 titles.

Neal, J. C. 1885 A
Discovery of another bed of fossil bones in the Alachua clays.
Amer. Naturalist, XIX, 834.

Nehring, A. 1880 A
Uebersicht über vierundzwanzig mittel-europäische Quartär-Faunen.
Zeitschr. deutsch. geol. Ges., XXXII, 478-509, 1 table.

—— 1882 A
Ueber den sogenannten Wolfezahn der Pferde.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1882, 31-36.

—— 1884 A
Fossile Pferde aus deutschen Diluvial-Ablagerungen und ihre Beziehungen zu den lebenden Pferden.
Landwirthsch. Jahrb. Berlin, XIII, 81-160, pls. v-ix.

—— 1890 A
Ueber *Cuon alpinus fossilis* Nehring, nebst Bemerkungen über einige andere fossile Caniden.
Neues Jahrb. Min. Geol. Pal., 1890, II, 34-52, pl. ii.

—— 1901 A
Fossile Kamele in Rumänien und die pleistocäne Steppenzeit Mitteleuropas.
Globus, LXXIX, 264-267, 2 text-figs.

—— 1901 B
Ein fossiles Kamel aus Südrussland, nebst Bemerkungen über die Heimat der Kamele.
Globus, LXXX, 188-189, 1 text-fig.

—— 1901 C
Über die heutige Fauna der russischen und westsibirischen Steppen in ihrer Beziehung zu der pleistocänen Steppenfauna Mittel-Europas.
Verh. internat. Geogr.-Kongr., VII, Berlin, pt. 2, 463-466.
Abstract in Geol. Centralbl., II, 412.

Nelson, E. W. 1909 A

The rabbits of North America.

N. A. Fauna, XXIX, 1-314, pls. i-xiii, 19 text-figs.

Brief abstract in Nature, London, LXXXI, 433.

Review in Amer. Naturalist, XLIV, 57-63.

Neumayer, L. 1904 A

Die Koprolithen des Perms von Texas.

Palaeontogr., LI, 121-128, pl. xiv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 319.

—— 1906 A

Ueber das Gehirn von *Adapis parisiensis* Cuv.

Neues. Jahrb. Min. Geol. Pal., 1906, II, Ref., 100-104, pl. v.

Abstract in Geol. Centralbl., X, 187.

—— 1913 A

Zur vergleichenden Anatomie des Schädels eocäner und rezenter Siluriden.

Palaeontogr., LIX, 251-288, pls. xxvi-xxix, 5 text-figs.

Abstracts in Geol. Centralbl., XIX, 569; Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 531; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 88-91.

Neuville, H. 1915 A

Remarques sur les incisives inférieures des ursidés et de quelques autres carnivores.

Bull. Mus. hist. nat. Paris, XXI, 6-12, pl. 1.

—— 1919 A

De l'extinction du mammouth.

L'Anthrop. Paris, XIX, 193-212, 3 figs.

Translation by Gerrit S. Miller, jr., in Smithson. Rep. for 1919 (1921), 327-338, pls. 1-3.

Abstract in Geol. Zentralbl., XXVIII, 375.

Newberry, J. S. 1857 D

On the deposit of fossil fishes and reptiles of Linton, Ohio.

Edinb. New Philos. Jour. (n.s.), V, 364-365.

—— 1861 A

Geological report.

Lieut. Ives' Colorado Explor. Exped., pt. iii, 1-53, with plates and illustrations.

U. S. Senate Ex. Doc., 36th Congress.

—— 1868 B

On some remarkable fossil fishes, etc.

Proc. Amer. Assoc. Adv. Sci., 16th meeting, Cambridge, 1867, 146-147, 2 figs.

Correction of citation in Hay, O. P., 1902 A, page 175.

Newberry, J. S.—Continued 1870 D

The ancient lakes of western America, their deposits and drainage.

Proc. Lyc. Nat. Hist. N. Y., I, 25-32.

—— 1870 E

Report on the progress of the Geological Survey of Ohio in 1869.

Geol. Surv. Ohio, 1869, pt. i, 3-53.

—— 1871 B

Announcement of discovery, by Prof. O. C. Marsh, of a species of *Pterodactylus*.

Proc. Lyc. Nat. Hist. N. Y., I, 241.

—— 1871 C

Fossil walrus.

Amer. Naturalist, V, 316.

—— 1873 E

Geology of Cuyahoga County [Ohio].

Geol. Surv. Ohio, I, pt. i, Geol., 171-200, map and sections.

—— 1873 F

Quaternary system [in Ohio].

Geol. Surv. Ohio, I, pt. 1, Geol., 85-88.

—— 1873 G

Devonian system [in Ohio].

Geol. Surv. Ohio, I, pt. 1, Geol., 140-167, figs. 28-42.

—— 1874 G

The Carboniferous system [in Ohio].

Geol. Surv. Ohio, II, pt. i, Geol., 81-180, 1 fig.

—— 1874 H

Report on the geology of Erie County and the islands; also of Lorain County [Ohio].

Geol. Surv. Ohio, II, pt. 1, Geol., 183-224, with map and figures.

—— 1878 C

The geological history of New York island and harbor.

Pop. Sci. Month., XIII, 641-660, 7 text-figs.

—— 1878 D

Report on the geology of Mahoning County.

Geol. Surv. Ohio, III, pt. 1, Geol., 781-814.

—— 1885 C

Descriptions of some peculiar screw-like fossils from the Chemung rocks.

Ann. N. Y. Acad. Sci., III, 217-220, pl. xviii.

Newcombe, C. F. 1914 A

Pleistocene raised beaches at Victoria, B. C.

Ottawa Naturalist, XXVIII, 107-110, maps, 2 figs.

Newcombe, C. F.—Continued 1915 A
Accessions of mammals.
Rep. Prov. Mus. Nat. Hist. Victoria, for 1914 (1915), 32-33.

Newman, H. H. 1906 A
The significance of scale and plate "abnormalities" in Chelonia.
Biol. Bull., x, 68-98, pls. i-vi; 99-114, pl. vi.
The bibliography comprises 28 titles.

—— 1906 B
Correlated abnormalities in the scutes and bony plates of Chelonia.
Science (n.s.), xxiii, 526.

—— 1913 A
The natural history of the nine-banded armadillo of Texas.
Amer. Naturalist, xlvii, 513-539, 7 figs.

—— 1916 A
Heredity and organic symmetry in armadillo quadruplets.
Biol. Bull., xxx, 173-209, 19 figs.

Newton, Alfred 1885 A
Ornithology.
Encyclop. Brit., ed. 8, xviii, 2-50.

——, and H. **Gadow** 1896 A
A dictionary of birds.
London, 8vo., i-xii+1-1088 pages, numerous text-figs.
Contains also contributions from R. Lydekker, C. S. Roy and R. W. Shufeldt.

Newton, E. Tulley 1876 A
On two chimæroid jaws from the Lower Greensand of New Zealand.
Quart. Jour. Geol. Soc., xxxii, 326-331, pl. xxi.

—— 1882 A
The Vertebrata of the Forest bed series of Norfolk and Suffolk.
Mem. geol. Surv. Eng. Wales, 1882, i-viii+1-143 pages, pls. i-xix.

—— 1886 B
A contribution to the history of the Cetacea of the Norfolk "Forest-bed."
Quart. Jour. Geol. Soc., xlii, 316-323, pl. xi.

—— 1888 B
On the skull, brain, and auditory organ of a new species of pterosaurian (*Scaphognathus purdoni*) from the Upper Lias, near Whitby, Yorkshire.
Proc. Roy. Soc. Lond., xliii, 436-440.
Abstract of paper designated as Newton, E. T., 1889 B.
See also Nature, xxxvii, 598-599.

Newton, E. Tulley—Continued 1891 A
The Vertebrata of the Pliocene deposits of Britain.
Mem. Geol. Surv. U. K., 1891, i-xi+1-137, pls. i-x.

—— 1894 A
Reptiles from the Elgin sandstone.
Phil. Trans. Roy. Soc. Lond., clxxxv, 573-607, pls. liii, lvi.
There is a list of 56 works consulted.

—— 1899 B
On a megalosauroid jaw from Rhætic beds near Bridgend (Glamorganshire).
Quart. Jour. Geol. Soc., lv, 89-96, pl. x.

—— 1899 C
On the remains of *Amia* from Oligocene strata in the Isle of Wight.
Quart. Jour. Geol. Soc., lv, 1-10, pl. i.
Presents a list of the described species.

—— 1900 A
[Discussion of paper by H. G. Seeley on *Aristodesmus.*]
Quart. Jour. Geol. Soc., lvi, 645.

—— 1904 A
On the occurrence of *Edestus* in the Coal-measures of Britain.
Quart. Jour. Geol. Soc., lx, 1-9, pl. i, 2 text-figs.
Abstracts in Geol. Centralbl., v, 328; Jahresber. Anat. Entwickl. (N.F.), x, Abth., 158; Rev. crit. Paléozool., viii, 90.

—— 1913 A
On the remains of *Ursus etruscus* (=*U. arvernensis*) from the Pliocene deposits of Tegelen sur Meuse.
Verh. Geol. Mijnb. Gen. (Geol. Ser.), i, 249-271, pls. iv, v.
The bibliography presents 13 titles.

—— 1917 A
Remark on *Edestus* and *Helicoprion.*
Quart. Jour. Geol. Soc., lxxii, 6.

New York World 1879 A
The home of the mastodon.
Kansas City Rev. Sci. Indust., iii, 263-266
An article credited to the N. Y. World newspaper.

Nicholls, George E. 1914 A
On an apparently distinctive character of the genus *Bufo.*
Nature, xciv, 420.

—— 1915 A
A note on the urostyle of the anurous Amphibia.
Proc. Zool. Soc. Lond., 1915, 239-242, 5 figs.

Nicholls, George E.—Continued 1916 A
The structure of the vertebral column in the Anura, Phaneroglossa, and its importance as a basis of classification.
Proc. Linn. Soc. Lond., CXXVIII, 80-92, 4 text-figs.
The bibliography presents 16 titles.

Nichols, J. T. 1923 A
Yellow-legs skeletons.
Auk, XL, 592-595.

Nick, Ludwig 1912 A
Das Kopfskelet von *Dermochelys coriacea* L.
Zool. Jahrb. Anat., XXXIII, 1-238, pls. i-xii and 16 text-figs.
An extensive bibliography occupies pages 215-225.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 91-94.

Nikitin, B. 1916 A
Développement du plastron chez la *Chelydra serpentina*.
Bull. Soc. Natural. Moscou (n.s.), XXIX, 229-272, pls. ii-v.
The paper is in Russian, but there is a résumé in French (pages 266-268). There is a bibliography of 34 titles.

Nilsson, Sven 1841 A
Entwurf einer systematischen Eintheilung und speciellen Beschreibung der Phoken.
Arch. Naturges., 1894, I, 301-333.
From the Swedish by W. Peters.

Nishi, Seiho 1920 A
Die Muskeln des Schultergürtels der Chimären und ihre vergleichende Anatomie.
Arb. anat. Inst. Univ. Sendai, Heft v, 27-48, 8 figs.
The bibliography presents 38 titles.

Nitsche, Heinrich 1898 A
Studien über Hirsche Gattung *Cervus* im weitesten Sinne. Heft I: Untersuchungen über mehrstangige Geweihe und die Morphologie der Hufthierhörner im Allgemeinen.
4to., Leipzig, i-xi+1-103 pages, pls. i-xii, 12 text-figs.
There is a bibliography of 75 titles.

Nitzsch, Christian Ludwig 1822 A
Ueber die Bewegung des Oberkiefers der eidechsenartigen Amphibien.
Deutsch. Arch. Physiol., VII, 68-85, pl. i.

—— 1862 A
Ueber die Familie der Passerinen.
Zeitschr. gesammt. Naturw., XIX, 389-408.

Nitzsch, C. L.—Continued 1862 B
Ornithologische Beobachtungen.
Zeitschr. gesammt. Naturw., XIX, 408-424.

Noack, Th. 1880 A
Neue Entdeckungen auf paläontologischem Gebiet welche sich auf die Descendenztheorie beziehen.
Jahresber. Ver. Naturwiss., Braunsch., 1879-1880, 76-78.

—— 1880 B
Die Bedeutung des *Hesperornis regalis* für die Descendenztheorie.
Jahresber. Ver. Naturwiss. Braunsch., 1879-1880, 89-90.

—— 1902 A
Equus przewalskii.
Zool. Anz., XXV, 135-145.

—— 1902 B
Die Entwicklung des Schädels vom *Equus przewalskii*.
Zool. Anz., XXV, 164-172.
Abstract in Jahresb. Anat. Entwickl., VIII, pt. 3, 32.

—— 1903 A
Zur Entwicklung von *Equus przewalskii*.
Zool. Anz., XXVI, 370-373.

—— 1907 A
Wölfe, Schakale, vorgeschichtliche und neuzeitliche Haushunde.
Zool. Anz., XXXI, 660-695.

—— 1908 A
Über die Abstammung nordrussischer Haushunde.
Zool. Anz., XXXIII, 254-264.

—— 1909 A
Haustiere der Altai-Kalmücken. III: Pferde.
Zool. Anz., XXXIV, 782-787, 2 text-figs.

—— 1910 A
Füchse und Wölfe des Altai.
Zool. Anz., XXXV, 457-475, 4 text-figs.

Noble, G. K. 1921 A
The anterior cranial elements of *Œdipus* and certain other salamanders.
Bull. Amer. Mus. Nat. Hist., XLIV, 1-6, 2 pls.

—— 1922 A
The phylogeny of the Salientia. I: The osteology and the thigh musculature; their bearing on classification and phylogeny.
Bull. Amer. Mus. Nat. Hist., XLVI, 1-89, pls. i-xxiii.
The bibliography includes 156 titles.

Noble, G. K.—Continued 1923 A

Chelys and the phylogeny of the turtles.

Amer. Naturalist, LVII, 377-379.

—— 1924 A

The "retrograde metamorphosis" of the Sirenidæ; experiments on the functional activity of the thyroid of the perennibranchs.

Anat. Record, XXIX, 100.

—— 1925 A

The evolution and dispersal of the frogs.

Amer. Naturalist, LIX, 265-271.

The bibliography comprises 11 titles.

—— 1926 A

An analysis of the remarkable cases of distribution of the Amphibia, with descriptions of new genera.

Amer. Mus. Novit., No. CCXII, 1-24, 9 figs.

In the bibliography are 17 titles.

See also **Gregory** and **Noble**; **Gregory, Miner, and Noble.**

Nomland, Jorgen O. 1916 A

Relation of the invertebrate to the vertebrate faunal zones of the Jacalitos and Etchegoin formations in the North Coalinga region, California.

Bull. Dept. Geol. Univ. Calif., IX, 77-88, pl. vii.

—— 1917 A

The Etchegoin Pliocene of middle California.

Bull. Dept. Geol. Univ. Calif., X, 191-254, pls. vi-xii, 2 text-figs.

—— 1917 B

Fauna of the Santa Margarita beds in the north Coalinga region of California.

Bull. Dept. Geol. Univ. Calif., X, 293-326, pls. xiv-xx, 2 text-figs.

Noorden, Carl 1883 A

Die Entwickelung des Labyrinthes bei Knochenfischen.

Arch. Anat. Entwickl., 1883, 235, pl. x.

Bibliography in foot-notes.

Noordenbos, W. 1905 A

On the development of the chondrocranium of *Talpa europæa*.

Handl. Ned. Nat. Geneesk. Congr., X, 1905, 221-225.

—— 1905 B

Ueber die Entwicklung des Chondrocraniums der Säugetiere.

Petrus Camper, Bijdr. Anat., III, 367-430, pls. vi-viii.

The bibliography embraces 44 titles.

Nopcsa, F. 1900 A

Dinosaurierreste aus Siebenbürgen (Schädel von *Limnosaurus transsylvanicus* nov. gen. et spec.).

Denk. Akad. Wiss. Wien., LXVIII, 555-591, pls. i-vi.

Abstract in Neues Jahrb. Min. Geol. Pal., I, 1901, 307.

See change of generic name in Geol. Mag. (4), X, 94.

—— 1901 A

Synopsis und Abstammung der Dinosaurier.

Földt. Közl., Suppl., XXXI, 247-288, pl. i.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 155; Geol. Centralbl., II, 665; Rev. crit. Paléozool., VII, 17.

—— 1901 B

A dinosaurusok átnézete és származása.

Földt, Közl., Suppl., XXXI, 193-226, pl. 1.

—— 1902 A

Über Rippen eines Deuterosauriden (*Deuterosaurus seeleyi* nov. spec.?).

Beitr. Pal. Geol. Oesterr.-Ung., XIV, 1902, 185-194, pl. xvii.

—— 1902 B

Notizen über cretacische Dinosaurier.

Sitz.-Ber. Akad. Wiss. Wien, CXI, Abth. I, 93-114, 1 plate, 1 text-fig.

Discusses the systematic position of the armoured dinosaurs.

Abstracts in Nature, LXVII, 426; Geol. Centralbl., V, 462; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 103-105.

—— 1902 C

Dinosaurierreste aus Siebenbürgen. II: (Schädelreste von *Mochlodon*). Mit einem Anhange: Zur Phylogenie der Ornithopodiden.

Denk. Akad. Wiss. Wien, LXXII, 149-175, pls. i, ii, 11 text-figs.

There are presented numerous references to the literature of the subject.

Abstracts in Geol. Centralbl., V, 463; Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 156; Rev. crit. Paléozool., VII, 15.

—— 1903 A

On the origin of the mosasaurs.

Geol. Mag. (4), X, 119-121.

Abstract in Rev. crit. Paléozool., VII, 132.

—— 1903 B

Neues über *Compsognathus*.

Neues Jahrb. Min. Geol. Pal., Beil.-Bd. XVI, 476-494, pls. xvii, xviii, 4 text-figs.

Abstracts in Geol. Centralbl., V, 463; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 165-166.

Nopcsa, F.—Continued 1903 C

Über die varanusartigen Lacerten Istriens.

Beitr. Pal. Geol. Oesterr.-Ung., xv, 1903, 30-42, pls. v, vi.

Abstracts in Geol. Centralbl., iv, 120, 1903; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 157-159.

—— 1903 D

Ueber *Stegoceras* und *Stereocephalus*.

Centralbl. Min. Geol. Pal., 1903, 266-267.

Abstracts in Geol. Centralbl., v, 462; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 169.

—— 1904 A

Dinosaurierreste aus Siebenbürgen. III (Weitere Schädelreste von *Mochlodon*).

Denk. Akad. Wiss. Wien, lxxiv, 229-263, pls. i, ii, 21 text-figs.

Many references to the literature.

Abstract in Jahresber. Anat. Entwickl. (N.F., x), Abth. 3, 170-171.

—— 1905 A

Notes on British dinosaurs. Part I: *Hypsilophodon*.

Geol. Mag. (5), ii, 203-208, 4 text-figs.

Abstracts in Geol. Centralbl., vii, 263; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 159.

—— 1905 B

Notes on British dinosaurs. Part II: *Polacanthus*.

Geol. Mag. (5), ii, 241-250, pl. xii, 8 text-figs.

Abstracts in Geol. Centralbl., vii, 263.

—— 1905 C

Notes on British dinosaurs. Part III: *Streptospondylus*.

Geol. Mag. (5), ii, 289-293, pl. xv.

Abstracts in Rev. crit. Paléozool., x, 18; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 159; Nature, lxxiii, 15.

—— 1905 D

Remarks on the supposed clavicle of the sauropodous dinosaur *Diplodocus*.

Proc. Zool. Soc. Lond., 1905, ii, 289-294, text-figs. 46-49.

Abstracts in Geol. Centralbl., x, 44; Rev. crit. Paléozool., xi, 74.

—— 1906 A

Zur Kenntnis des Genus *Streptospondylus*.

Beitr. Pal. Geol. Oesterr.-Ung., xix, 1906, 59-83, 18 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 162.

Nopcsa, F.—Continued 1907 A

Ideas on the origin of flight.

Proc. Zool. Soc. Lond., 1907, i, 223-236, text-figs. 74-82.

Abstracts in Geol. Centralbl., x, 370; Sci. Progress, ii, 513; Neues Jahrb. Min. Geol. Pal., 1909, i, Ref., 282; Amer. Jour. Sci. (4), xxv, 528-529.

—— 1908 A

Zur Kenntnis der fossilen Eidechsen.

Beitr. Pal. Geol. Oesterr.-Ung., xxi, 33-62, 1 plate, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 161.

—— 1911 A

Notes on British dinosaurs. Part IV: *Stegosaurus priscus*, sp. nov.

Geol. Mag. (5), viii, 109-115, text-figs. 1-3; 145-153, text-figs. 4-9.

Abstract in Geol. Centralbl., xvii, 664-665.

—— 1911 B

Omosaurus lennieri, un nouveau dinosaurien du Cap. de la Hève.

Bull. Soc. géol. Normandie, xxx, 1-20, pls. i-vii.

—— 1912 A

Notes on British dinosaurs. Part V: *Craterosaurus* (Seeley).

Geol. Mag. (5), ix, 481-484, 2 text-figs.

—— 1914 A

Die Lebensbedingungen der obercretacischen Dinosaurier Siebenbürgens.

Centralbl. Min. Geol. Pal., 1914, 564-574.

Abstract in Geol. Zentralbl., xxii, 412.

—— 1915 A

Über Geschlechtsunterschiede bei Dinosauriern.

Centralbl. Min. Geol. Pal., 1915, 385-388, 2 text-figs.

Abstract in Geol. Zentralbl., xxii, 446.

—— 1915 B

Die Dinosaurier der siebenbürgischen Landesteile Ungarns.

Mitt. Jahrb. Ungar. Geol. Reichsanst., xxiii, 1-26, pls. i-iv, 3 text-figs.

—— 1916 A

Zu Körpertemperatur der Pterosaurier.

Centralbl. Min. Geol. Pal., 1916, 418-419.

Abstract in Geol. Zentralbl., xxiii, 255.

Nopcsa, F.—Continued 1917 A

Über Dinosaurier. 1: Notizen über die Systematik der Dinosaurier.

Centralbl. Min. Geol. Pal., 1917, 203-213.
There is a bibliography of 14 titles.
Abstract in Geol. Zentralbl., xxiv, 29.

—— 1917 B

Ueber Dinosaurier. 2: Die Riesenformen unter den Dinosauriern. 3: Über die Pubis der Orthopoden.

Centralbl. Min. Geol. Pal., 1917, 332-351, 11 figs.
The bibliography presents 73 titles.

—— 1918 A

Über Dinosaurier. 4: Neues über Geschlectsunterschiede bei Orthopoden.

Centralbl. Min. Geol. Pal., 1918, 186-198, 12 figs.
There is a bibliography of 34 titles.
Abstract in Geol. Zentralbl., xxiv, 187.

—— 1918 B

Notizen über Dinosaurier. 5: Beiträge zu ihrer Evolution.

Centralbl. Min. Geol. Pal., 1918, 235-246.

—— 1918 C

Leipsanosaurus n. gen. Ein neuer Thyreophore aus der Gosau.

Földt. Közl., xlviii, 324-328, pl. iii.

—— 1921 A

Zur systematischen Stellung von *Poposaurus* (Mehl).

Centralbl. Min. Geol. Pal., 1921, 348.
Abstract in Geol. Zentralbl., xxviii, 283.

—— 1922 A

Bemerkungen zur Systematik der Reptilien.

Palaeont. Zeitschr., v, 107-118.
Abstract in Geol. Zentralbl., xxxii, 117.

—— 1922 B

Neubeschreibung des Trias-Pterosauriers *Tribelesodon*.

Palaeont. Zeitschr., v, 161-181, pls. i, ii, 7 text-figs.
The bibliography presents 11 titles.
Abstracts in Anz. Akad. Wiss. Wien, 1922, No. 18; Geol. Zentralbl., xxxii, 121.

—— 1922 C

On the probable habits of the dinosaur *Struthiomimus*.

Ann. Mag. Nat. Hist. (9), x, 152-155, 1 fig.

—— 1922 D

A case of secondary adaptation in a tortoise.

Ann. Mag. Nat. Hist. (9), x, 155-157.

Nopcsa, F.—Continued 1923 A

Notes on British dinosaurs, Pt. VI: *Acanthopholis*.

Geol. Mag., lx, 193-199, pls. vii, viii.
Abstracts in Geol. Zentralbl., xxx, 24; 539-540.

—— 1923 B

Vorläufige Notiz über die Pachyostose und Osteosklerose einiger mariner Wirbeltiere.

Anat. Anz., lvi, 353-359.

—— 1923 C

On the origin of flight in birds.

Proc. Zool. Soc. Lond., 1923, 463-477, 7 figs.
The bibliography presents 21 titles.

—— 1923 D

On the geological importance of the primitive reptilian fauna of the uppermost Cretaceous of Hungary; with a description of a new tortoise (*Kallokibotion*).

Quart. Jour. Geol. Soc., lxxix, 100-116.
The bibliography cites 79 titles.
Abstract in Rev. crit. Paléozool., xxvii, 210; Neues Jahrb. Min. Geol. Pal., 1925, ii, 88-89.

—— 1923 E

Reversible and irreversible evolution; a study based on reptiles.

Proc. Zool. Soc. Lond., 1923, 1045-1059, 2 text-figs.
The bibliography presents 19 titles.

—— 1923 F

Kallokibotium, a primitive amphichelydean tortoise from the uppermost Cretaceous of Hungary.

Palaeont. Hungarica, i, 1-34, pls. i-iv, 5 text-figs.
A bibliography of 74 titles is presented.

—— 1923 G

Eidolosaurus und *Pachyophis*: Zwei neue Neocom-Reptilien.

Palaeontogr., lxv, 96-154, pls. vii, viii.
Appended is a bibliography of 141 titles.

—— 1923 H

Die Familien der Reptilien.

Fortschr. Geol. Palaeont., Heft ii, i-iv; 1-210, pls. i-vi.
There are numerous references in the footnotes to the literature pertaining to the subject.
Comment on in Naturwissenschaften, Berlin, 1925, xiii, 437.

—— 1924 A

Über die Namen einiger brasilianischer fossiler Krokodile.

Centralbl. Min. Geol. Pal., 1924, 378.
Abstract in Geol. Zentralbl., xxxii, 120.

Nopcsa, F.—Continued 1924 B

Bemerkungen und Ergänzungen zu G. v. Arthaber's Arbeit über Entwicklung und Absterben der Pterosaurier.

Palaeont. Zeitschr., VI, 80-91.

Abstract in Geol. Zentralbl., XXXII, 122.

—— 1924 C

On the systematic position of *Saurosternon* and *Tangasaurus*.

S. Afric. Jour. Sci., XXI, 206-207.

—— 1925 A

Wirbeltier-Reste der Baharije-Stufe (unterstes Cenoman). 5: Die *Symoliophis*-Reste.

Abh. Bayer. Akad., XXX, Bd. 4, 1-27, pl. i, 2 text-figs.

—— 1925 B

On some reptilian bones from the Eocene of Sokoto.

Geol. Surv. Nigeria., Occas. Pap. No. 2, 1-16, 1 pl., 1 text-fig.

The bibliography records 11 titles.

—— 1925 C

Über die von Professor Stromer im Cenoman Aegyptens entdeckten Reste von *Symoliophis*.

Palaeont. Zeitschr., VII, 164-165, 166.

—— 1926 A

Heredity and evolution.

Proc. Zool. Soc. Lond., 1926, 633-665, 9 text-figs.

In the bibliography are 116 titles.

Nordenskiöld, Erland 1900 A

La grotte du *Glossotherium* (*Neomylodon*) en Patagonie.

Bull. Soc. géol. France (3), XXVIII, 29-32.

—— 1903 A

Ueber die Säugetierfossilien des Tarijatals, Südamerika, I: *Mastodon andium* Cuv.

Svensk. Vet. Akad. Handl., XXXVII, No. 4, 1-30, pls. i-vi. See also Bull. Geol. Inst. Upsala, v, 1902.

There are numerous references to the literature of the subject.

Abstract in Geol. Centralbl., XIII, 109-110.

Norman, E. W. 1926 A

The development of the chondrocranium of the eel (*Anguilla vulgaris*), with observations on the comparative morphology and development of the chondrocranium in bony fishes.

Phil. Trans. Roy. Soc. Lond., B, CCXIV, 369-464, 56 figs.

The bibliography (pages 458-463) records 85 titles. Additional titles are in foot-notes.

Norris, H. W. 1903 A

The membrane bones in the skull of a young *Amphiuma*.

Proc. Iowa Acad. Sci., X, 69-74.

—— 1908 A

The cranial nerves of *Amphiuma means*.

Jour. Comp. Neur., XVIII, 527-559, pls. iv-viii.

There is a bibliography of 21 titles.

—— 1913 A

On certain features of the anatomy of *Siren lacertina*.

Anat. Anz., XLIII, 516-519.

—— 1913 B

The cranial nerves of *Siren lacertina*.

Jour. Morphol., XXIV, 245-338, 44 figs.

The bibliography occupies pages 336-338.

Norsa, Elisa 1895 A

Recherches sur la morphologie des membres antérieurs des oiseaux.

Arch. ital. Biol., XXII, 232-241.

Norton, A. H. 1924 A

Another fossil caribou from New York State.

Jour. Mamm., V, 132-133.

Norton, O. D. 1875 A

Discovery of the horns of an extinct species of ox in Ohio.

Amer. Jour. Sci. (3), X, 386.

Probably extracted from Cincinnati Gazette. (See Smith, H. P., 1887 A, page 20.)

Norton, William Harmon 1901 A

Geology of Cedar County [Iowa].

Iowa Geol. Surv., XI, 1900, 281-396, with maps.

—— 1906 A

The geology of Bremer County [Iowa].

Iowa Geol. Surv., XVI, 321-405, map and illustrations.

Nowikoff, M. 1907 A

Über das Parietalauge von *Lacerta agilis* und *Anguis fragilis*.

Biol. Centralbl., XXVII, 364-370, 5 text-figs.

—— 1909 A

Untersuchungen über die Structur des Knochens.

Zeitschr. wiss. Zool., XCII, 1-50, pls. i-v, 1 text-fig.

In this paper the author's name is given as Novikov, M. M.

Nowikoff, M.—Continued 1910 A
Untersuchungen über den Bau, die Entwicklung und die Bedeutung des Parietalauges von Sauriern.
Zeitschr. wiss. Zool., XCVI, 118-207, pls. iii-viii, 10 text-figs.
Brief abstract in Nature, LXXXIV, 469-470.

—— 1910 B
Zur Frage über die Paarigkeit der Epiphyse und des Parietalauges der Saurier.
Biol. Zeitschr. Moscou, I, 167.
Abstract in German of paper in Russian on pages 161-166.

—— 1912 A
Über die Entwicklung und morphologische Bedeutung des Parietalauges bei Sauriern.
Verh. internat. Zool.-Kongr., VIII, Graz, 1910, 334-338.

Nunn, Emily 1882 A
On the development of the enamel of the teeth of vertebrates.
Proc. Roy. Soc. Lond., XXXIV, 156-165, pls. ii-iv.

Nusbaum, Joseph 1881 A
Ueber das anatomische Verhältnis zwischen dem Gehörorgane und der Schwimmblase bei den Cyprinoiden.
Zool. Anz., IV, 552-556.

—— 1907 A
Zur Histogenese der Lederhaut und die Cycloidschuppen der Knochenfische.
Anat. Anz., XXX, 297-310, 10 figs.

—— 1908 A
Entwickelungsgeschichte und morphologische Beurteilung der Occipitalregion des Schädels und der Weberschen Knöchelchen bei den Knochenfischen (*Cyprinus carpio* L).
Anat. Anz., XXXII, 513-532, 14 figs.
There are numerous references to the papers of other authors.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 76.

—— 1908 B
Zur Entwicklungsgeschichte der Occipitalregion des Schädels und der Weberschen Knöchelchen bei den Cyprinoiden.
Bull. internat. Acad. Sci. Cracovie. Cl. math. nat., 1908, 505-508.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 76.

Obalski, T. 1904 A
Les grands mammifères fossiles dans le Yukon et l'Alaska.
Bull. Mus. hist. nat. Paris, X, 214-217.
Published in Rev. Scient. (5), VI, 79-81; also in La Nature, XXXII, 3-5.
Abstract in Geol. Centralbl., V, 460.

Oberholser, Harry C. 1908 A
A synopsis of the genera and species of Cygninæ.
Emu, VIII, 1-11.

O'Donoghue, Charles H. 1913 A
A table for use in the identification of birds' skulls.
Zool. Anz., XLI, 465-468.

Oehngren, Siri 1919 A
Über die sog. Episternalbildungen bei den Säugetieren.
Anat. Anz., LII, 161-187, 20 figs.
The bibliography presents 27 titles.

Oertel, Walter 1914 A
Toxochelys gigantea nov. sp.; eine neue Schildkröte aus dem Aptien von Hannover.
Jahresber. Niedersachs. geol. Ver., VII, 91-106, 1 fig.
Abstract in Geol. Zentralbl., XXI, 589.

—— 1924 A
Die Schildkröten fauna des nordwestdeutschen oberen Jura.
Palaeont. Zeitschr., VI, 42-79, 17 figs.
In the bibliography 72 titles are recorded.

Ogilby, J. Douglas 1911 A
On the genus *"Gonorrhynchus"* (Gronovius).
Ann. Queensl. Mus., No. 10, 30-35.

Ogushi, K. 1911 A
Anatomische Studien an der japanischen dreikralligen Lippenschildkröte (*Trionyx japanicus*). I Mitteilung.
Morphol. Jahrb., XLIII, 1-106, 4 text-figs., pls. i-vi.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 71.

—— 1911 B
Berichtigung zur Mittheilung über anatomische Studien an der japanischen Lippenschildkröte.
Morphol. Jahrb., XLIV, 127.

—— 1913 A
Anatomische Studien an der japanischen dreikralligen Lippenschildkröte (*Trionyx japanicus*). II. Muskel- und peripheres Nervensystem.
Morphol. Jahrb., XLVI, 299-562, text-figs. 5-42, pls. vi-xiii, figs. 50-77.

O'Harra, Cleoppas C. 1910 A

The badland formations of the Black Hills region.

Bull. S. Dakota Sch. Mines, IX, 1-152, pls. i-l, 20 text-figs.

A bibliography occupies pages 135-144.

On pages 125-134 is a list of the species of fossil vertebrates that have been found in the badland formations of the Black Hills region.

—— 1916 A

Note on locality of a fossil fish.

Amer. Jour. Sci. (4), XLI, 347.

In Hussakof, L., 1916 A.

—— 1920 A

The White River Badlands.

Bull. S. Dakota Sch. Mines. XIII, 1-181, pls. i-xcvi, 75 text-figs.

Ohm, 1908 A

Die Lehre vom Zahnalter.

Zeitschr. Veterinark., XX, 356-365.

Discusses the structure and condition of the teeth of horses at various ages.

Okajima, Keji 1908 A

Die Osteologie des *Onychodactylus japonicus.*

Zeitschr. wiss. Zool., XCI, 351-381, pl. xiii, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 77, 96.

Oken, L. 1818 A

Wie Oken zur Deutung der Schädelknochen gekommen ist.

Isis von Oken, II, 512.

—— 1819 A

Bein-Philosophie: Umgerissen von O[ken].

Isis von Oken, V, 1528-1548, pl. xviii.

—— 1823 A

Zahnsystem.

Isis von Oken, 1823, Lit. Anz., 274-350.

—— 1823 B

Brustgerüste, Schultergerüste, Becken.

Isis von Oken, 1823, Lit. Anz., 444-455.

Olcott, Theodore F. 1909 A

A new species of *Teleoceras* from the Miocene of Nebraska.

Amer. Jour. Sci. (4), XXVIII, 403-404.

Abstract in Geol. Centralbl., XV, 217.

Olmstead, Miriam P. 1911 A

Das Primordialcranium eines Hundeembryo. Ein Beitrag zur Morphologie des Säugetierschädels.

Anat. Hefte, Arb., XLIII, 335-375, pls. xxxiv-xliii.

Twenty-two titles are listed in the bibliography.

Oppenheim, Stefanie 1911 A

Zur Typologie des Primatencraniums.

Zeitschr. Morphol. Anthrop., XIV, 1-203, pls. i-xiv, 34 text-figs.

The bibliography of the subject occupies pages 199-203.

Ortmann, Arnold Edward 1901 A

Some remarks on President D. S. Jordan's article on the geographical distribution of fishes.

Science (n.s.), XIV, 694-695.

For remarks on by D. S. Jordan, see Science (2), XIV, 936.

—— 1909 A

Eine miozäne Tragödie.

Aus der Natur, Leipzig, Jahrg., V, 21-24, 1 text-fig.

On *Promerycochoerus carrikeri.*

—— 1909 B

Teufels-Korkzieher.

Aus der Natur, Leipzig, Jahrg., V, 177-180, 3 text-figs.

Orton, Edward 1870 A

On the occurrence of a peat bed beneath deposits of drift in southwestern Ohio.

Amer. Jour. Sci. (2), L, 54-57.

—— 1873 A

Geology of Hamilton County [Ohio].

Geol. Surv. Ohio, I, pt. 1, 419-434, with map.

—— 1878 A

Report on the geology of Franklin County.

Geol. Surv. Ohio, III, pt. 1, 596-646, with map.

Osawa, Gakutaro 1901 A

Beiträge zur Anatomie des japanischen Riesensalamanders.

Mitt. med. Facultät Kais-japan, Univ. Tokio, V, 221-427, pls. xi-liv.

The bibliography cites 201 titles.

Osborn, H. F. 1893 M

A new suborder of the Ancylopoda.

Trans. N. Y. Acad. Sci., XII, 95-96 (Abstract).

—— 1893 N

The evolution of teeth in Mammalia in its bearing upon the problem of phylogeny.

Trans. N. Y. Acad. Sci., XII, 187 (Abstract).

—— 1897 H

A great naturalist: Edward Drinker Cope.

Cent. Mag. (n.s.), XXXIII; (o.s. LV), 1897, 10-15, portrait of Cope.

Osborn, H. F.—Continued 1897 I

Abstracts of papers read before New York Academy of Sciences.

Science (n.s.), VI, 107.

—— 1898 I

Abstract in Geol. Mag. (4), V, 374.

—— 1898 O

Abstract in Nature, LVIII, 426-427.

—— 1898 S

Reconstruction and model of *Phenacodus primævus* Cope.

Rept. Brit. Assoc. Adv. Sci., 67th Meet., Toronto, 1897, 684.

—— 1898 T

On skeletons and restorations of Tertiary Mammalia.

Rep. Brit. Assoc. Adv. Sci., LXVII, Toronto, 1897, 684.

—— 1898 U

The origin of the Mammalia.

Rep. Brit. Assoc. Adv. Sci., 67th Meet., Toronto, 1897, 686-687.

—— 1898 V

Wasatch and Bridger beds in the Huerfano lake basin.

Proc. Amer. Assoc. Adv. Sci., XLVI, 205-206.

—— 1899 J

The origin of mammals.

Proc. internat. Zool. Congr., IV, Cambridge, 1898, 415-419.

This paper, with only slight differences, appeared first in the February number of vol. VII, 1899, of the Amer. Jour. Sci.

—— 1899 K

Fossil vertebrates in the American Museum of Natural History.

Nature, LIX, 272-275, 5 figs.

—— 1900 A

Abstracts in Geol. Centralbl., II, 89; Anat. Hefte, Ergebn., XIV, 1084.

—— 1900 C

Abstract in Geol. Centralbl., II, 87.

—— 1900 F

Abstract in Geol. Centralbl., II, 87.

—— 1900 I

Abstract in Geol. Centralbl., I, 700.

—— 1900 J

Abstract in Anat. Hefte, Ergebn., XIV, 1084.

—— 1900 K

Reviewed in Geol. Mag. (4), VII, 1900, 417-419.

Osborn, H. F.—Continued 1901 A

Des méthodes précises mises actuellement en oeuvre dans l'étude des vertébrés fossiles des Etats-Unis d'Amérique.

C. R. Congr. Geol. internat. Paris, VIII, 353-356, pls. i, ii.

The plates show the skeletons of *Equus scotti* and of *Protorohippus*, and a restoration of *Protorohippus*.

Abstract in Geol. Centralbl., III, 112.

—— 1901 B

Corrélation des horizons de mammifères tertiares en Europe et en Amérique.

C. R. Congr. Geol. Internat. VIII, Paris, 1900, 357-363.

Abstract in Geol. Centralbl., III, 105.

—— 1901 C

The recent progress of vertebrate paleontology in America.

Science (n.s.), XIII, 45-49.

Abstract in Geol. Centralbl., II, 799.

—— 1901 D

Systematic revision of the American Eocene primates and of the rodent family Mixodectidæ.

Science (n.s.), XIII, 623-624 (abstract).

—— 1901 E

Discoveries of *Plesiosaurus* and of *Portheus*.

Science (n.s.), XIV, 331.

—— 1901 F

Recent zoopaleontology.

Science (n.s.), XIV, 330-331, 498-499, 578-580, 622, 699-700.

—— 1901 G

Summer work of the department of vertebrate palæontology.

Amer. Mus. Jour., I, 159-160.

—— 1901 H

The phylogeny of the rhinoceroses of Europe.

Ann. N. Y. Acad. Sci., XIII, 505.

—— 1902 A

Dolichocephaly and brachycephaly in the lower mammals.

Bull. Amer. Mus. Nat. Hist., XVI, 77-89, 5 figs.

Abstracts in Ann. N. Y. Acad., XIV, 147 (1902); Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 302-304; Geol. Centralbl., IV, 398; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 107-108.

Osborn, H. F.—Continued 1902 B

The four phyla of Oligocene titanotheres.

Bull. Amer. Mus. Nat. Hist., xvi, 91-109, figs. 1-13.

Abstracts in Science (n.s.), xv, 626; Ann. N. Y. Acad. Sci., 1903, xv, 44-45; Neues Jahrb. Min. Geol. Pal., 1904, i, Ref., 297-298; Geol. Centralbl., iv, 399; Rev. crit. Paleozool, vii, 7; Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 119.

—— 1902 C

American Eocene primates and the supposed rodent family Mixodectidæ.

Bull. Amer. Mus. Nat. Hist., xvi, 169-214, 40 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, i, Ref., 290-294; Geol. Centralbl., iv, 475; Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 114-115.

—— 1902 D

Homoplasy as a law of latent or potential homology.

Amer. Naturalist, xxxvi, 259-271, 6 text-figs.

Abstracts in Geol. Centralbl., ix, 659; Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 84-87.

—— 1902 E

The law of adaptive radiation.

Amer. Naturalist, xxxvi, 353-363, 4 text-figs.

Abstracts in Geol. Centralbl., ix, 659; Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 85.

—— 1902 F

The four phyla of titanotheres.

Science (n.s.), xv, 626.

An abstract of Osborn, H. F., 1902 B.

—— 1902 G

Recent zoopaleontology.

Science (n.s.), xv, 355-357, 514.

—— 1902 H

Recent zoopaleontology.

Science (n.s.), xvi, 673-676, 713-715, 749-752.

—— 1902 I

On Vertebrata of the Mid-Cretaceous of the Northwest Territory. I: Distinctive characters of the Mid-Cretaceous fauna.

Contrib. Canad. Pal., iii (4to), pt. ii, 1-21.

Abstract in Geol. Centralbl., ix, 653. Note on in Canad. Rec. Sci., ix, 86; Rev. crit. Paléozool., vii, 21.

Osborn, H. F.—Continued 1903 A

Ornitholestes hermanni; a new compsognathoid dinosaur from the Upper Jurassic.

Bull. Amer. Mus. Nat. Hist., xix, 459-464, text-figs. 1-3.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, i, Ref., 152; Geol. Centralbl., v, 143; Rev. crit. Paléozool., viii, 81-82; Jahresber. Anat. Entwickl. (N. F.), ix, pt. 3, 167.

—— 1903 B

Glyptotherium texanum, a new glyptodont from the lower Pleistocene of Texas.

Bul. Amer. Mus. Nat. Hist., xix, 491-494, pl. xliii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, ii, Ref., 306; Rev. crit. Paléozool., ix, 5; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 185.

—— 1903 C

The skull of *Creosaurus.*

Bull. Amer. Mus. Nat. Hist., xix, 697-701, 2 text-figs.

Abstracts in Rev. crit. Paléozool., viii, 210; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 167.

—— 1903 D

Recent zoopaleontology.

Science (n.s.), xvii, 157-158, 312-314, 356-357, 673-674.

Abstract in Jahresber. Anat. Entwickl., (N.F.), x, Abth. 3, 154-155. Also in Geol. Centralbl., ix, 636, 637, 660.

—— 1903 E

Evolution of the Proboscidea in North America.

Science (n.s.), xvii, 249.

—— 1903 F

On the primary division of the Reptilia, into two sub-classes, Synapsida and Diapsida.

Science (n.s.), xvii, 275-276.

—— 1903 G

Recent zoopaleontology.

Science (n.s.), xviii, 665-668, 699-702, 835-837.

Abstract in Geol. Centralbl., ix, 659.

—— 1903 H

The reptilian subclasses Diapsida and Synapsida and the early history of the Diaptosauria.

Mem. Amer. Mus. Nat. Hist., i, 449-507, pl. xl, 24 text-figs.

Abstracts in Geol. Centralbl., ix, 661-662; Rev. crit. Paléozool., viii, 84-90; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 154-156.

Osborn, H. F.—Continued 1903 I
On recent models and restorations of a number of extinct animals, with a discussion of their probable habits and mode of life.
Science (n.s.), XVIII, 978.
An abstract.

—— 1904 A
An armadillo from the Middle Eocene (Bridger) of North America.
Bull. Amer. Mus. Nat. Hist., XX, 163-165.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 187; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 163-165; Rev. crit. Paléozool., IX, 3.

—— 1904 B
New oligocene horses.
Bull. Amer. Mus. Nat. Hist., XX, 167-179; pls. iv, v; text-figs. 1-8.
Abstracts in Jahresber. Anat. Entwickl. (N. F.), X, Abth. 3, 182; Rev. crit. Paléozool., IX, 4.

—— 1904 C
Manus, sacrum, and caudals of Sauropoda.
Bull. Amer. Mus. Nat. Hist., XX, 181-190, 6 text-figs.
Abstracts in Jahresber. Anat. Entwickl. (N. F.), X, Abth. 3, 171-172; Rev. crit. Paléozool., VIII, 210.

—— 1904 D
New Miocene rhinoceroses with revision of known species.
Bull. Amer. Mus. Nat. Hist., XX, 307-326, 21 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, II, Ref, 133-135; Jahresber. Anat. Entwickl (N.F.), X, Abth. 3, 181; Rev. crit. Paléozool., IX, 68.

—— 1904 E
The great Cretaceous fish *Portheus molossus* Cope.
Bull. Amer. Mus. Nat. Hist., XX, 377-381, pl. X, 4 text-figs.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 159; Rev. crit. Paléozool., IX, 77.

—— 1904 F
Revised list of casts, models, photographs and restorations of fossil vertebrates.
Bull. Amer. Mus. Nat. Hist., XX, App., 1-52, 8 text-figs.

—— 1904 G
Palæontological evidence for the original tritubercular theory.
Amer. Jour. Sci. (4), XVII, 321-323, pl. XXI.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 177; Rev. crit. Paléozool., IX, 2-3.

Osborn, H. F.—Continued 1904 H
Reclassification of the Reptilia.
Amer. Naturalist, XXXVIII, 93-115, 13 text-figs.
Abstracts in Geol. Centralbl., IX, 661; Nature, LXXI, 615; Rev. crit. Paléozool., VIII, 206-209; Geol. Mag. (5), I, 517.

—— 1904 I
Recent zoopaleontology.
Science (n.s.), XIX, 35-36, 271-272.

—— 1904 J
On the position of the bones of the forearm in the *Opisthocoelia* or *Sauropoda*.
Science (n.s.), XIX, 255-256.

—— 1904 K
Conclusive paleontological evidence for the tritubercular theory.
Science (n.s.), XIX, 256.

—— 1904 L
A reclassification of the Reptilia.
Science (n.s.), XIX, 256-257 (abstract).

—— 1904 M
On the primary components of vertebræ and their relations to ribs.
Science (n.s.), XIX, 257.

—— 1904 N
The classification of the Reptilia.
Science (n.s.), XIX, 307-308.

—— 1904 O
Recent advances in our knowledge of the evolution of the horse.
Proc. Amer. Philos. Soc., XLIII, 156-157.
Abstract in Science (n.s.), XIX, 717.

—— 1904 P
Teleorhinus browni—a teleosaur in the Fort Benton.
Bull. Amer. Mus. Nat. Hist., XX, 239-240.
Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 169; Rev. crit. Paléozool., IX, 71; Jour. Geol., XIII, 184.

—— 1904 Q
Fossil wonders of the West. The dinosaurs of the Bone-Cabin quarry.
Cent. Mag., LXVIII (n.s. XLVI) Sept., 680-694, 16 illustrations.
Abstract in Nature, London, LXXI, 279.
Reprint in Handbook series, No. 5, Amer. Mus. Nat. Hist., 1915, 131-152.

—— 1904 R
The evolution of the horse in America.
Cent. Mag., LXIX (n.s. XLVII), 3-17, with 12 figs.
For a correction see page 317 of same volume.

Osborn, H. F.—Continued 1904 S

Abstracts of papers read at meeting of National Academy of Sciences.

Scient. Amer., xc, 366.

1905 A

Tyrannosaurus and other Cretaceous carnivorous dinosaurs.

Bull. Amer. Mus. Nat. Hist., xxi, 259-265, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, ii, Ref., 492; Geol. Centralbl., xii, 221; and in Nature, lxxiii, 229-230.

1905 B

Recent discoveries of extinct animals in the Rocky Mountain region and their bearings on the present problems of evolution.

Science (n.s.), xxi, 28.

See Ann. N. Y. Acad. Sci., xvi, 358.

1905 C

The phylogeny and classification of the Reptilia.

Science (n.s.), xxi, 294-295.

1905 D

Recent zoopaleontology.

Science (n.s.), xxi, 315-316.

Brief abstract in Geol. Centralbl., x, 465.

1905 E

Fossil mammals of Mexico.

Science (n.s.), xxi, 931-932.

Abstracts in Geol. Centralbl., x, 465; Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 126-127.

1905 F

Recent vertebrate paleontology.

Science (n.s.), xxii, 188-189.

Brief abstract in Geol. Centralbl., x, 188-189.

1905 G

Skull and skeleton of the sauropodous dinosaurs, *Morosaurus* and *Brontosaurus*.

Science (n.s.), xxii, 374-376.

1905 H

Ten years progress in the mammalian palaeontology of North America.

Amer. Geologist, xxxvi, 199-229, pl. xii, 7 text-figs.

Noted in Geol. Centralbl., x, 465.

1905 I

Ten years progress in the mammalian palaeontology of North America.

Verh. internat. Zool.-Kongr., vi, Bern, 1904, 86-113, pls. i-xv, 7 text-figs.

Résumé in Neues Jahrb. Min. Geol. Pal., 1907, i, Ref., 454-458.

Osborn, H. F.—Continued 1905 J

Evolution of the horse. Recent discoveries and studies.

Verh. internat. Zool.-Kongr., vi, Bern, 1904, 282.

1905 K

The evolution of the horse.

Rep. Brit. Assoc. Adv. Sci., lxxiv, Cambridge, 1904, 607-608.

1905 L

Western explorations for fossil vertebrates.

Pop. Sci. Month., lxvii, 561-568, 6 figs.

1905 M

Ichthyosaurs. The evolution of fitness in ichthyosaurs.

Cent. Mag., lxix (n.s. xlvii), 414-422, 6 illustrations.

1905 N

The present problems of paleontology.

Pop. Sci. Month., lxvi, 226-242.

1905 O

The ideas and terms of modern philosophical anatomy.

Science (n.s.), xxi, 959-961.

1906 A

Tyrannosaurus, Upper Cretaceous carnivorous dinosaur (2d comm.).

Bull. Amer. Mus. Nat. Hist., xxii, 281-296, pl. xxxix, 12 text-figs.

Abstracts in Sci. Progress, i, 456; Nature, London, lxxiv, 416; Rev. crit. Paléozool., 145-146; Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 163.

1906 B

Recent vertebrate paleontology.

Science (n.s.), xxiv, 55-57.

1906 C

The causes of extinction of Mammalia.

Amer. Naturalist, xl, 769-795, 829-859.

Abstracts in Geol. Centralbl., xi, 473; Rev. crit. Paléozool., xi, 207-211.

1906 D

The skeleton of *Brontosaurus* and skull of *Morosaurus*.

Nature, lxxiii, 282-284, 4 text-figs.

Abstracts in Geol. Centralbl., vii, 661; xi, 108-109; Neues Jahrb. Min. Geol. Pal., 1910, ii, Ref., 143.

1906 E

Preface to ["The Arab Horse," by Spencer Borden].

vii-xiii pages.

Osborn, H. F.—Continued 1906 F

Mountain goat hunting with the camera.

Rep. N. Y. Zool. Soc., x, 217-233, 17 figs.

—— 1907 A

Tertiary mammal horizons of North America.

Bull. Amer. Mus. Nat. Hist., xxiii, 237-253, 3 text-figs.

Reviewed in Amer. Jour. Sci. (4), xxiv, 504-505. Abstracts in Geol. Centralbl., xi, 376; Rev. crit. Paléozool., xi, 211-213; Sci. Progress, ii, 501.

—— 1907 B

A mounted skeleton of the Columbian mammoth (*Elephas columbi*).

Bull. Amer. Mus. Nat. Hist., xxiii, 255-257, 1 text-fig.

Brief abstracts in Geol. Centralbl., xi, 379; Sci. Progress, ii, 511; Rev. crit. Paléozool., xi, 219.

—— 1907 C

Points of the skeleton of the Arab horse.

Bull. Amer. Mus. Nat. Hist., xxiii, 259-263, 3 text-figs.

Reviewed in Amer. Jour. Sci. (4), xxiv, 380-381.

—— 1907 D

A mounted skeleton of *Naosaurus*, a pelycosaur from the Permian of Texas.

Bull. Amer. Mus. Nat. Hist., xxiii, 265-270, pls. ix, x, 3 text-figs.

Abstracts in Sci. Progress, ii, 519; Rev. crit. Paléozool., xi, 226; Jahresber. Anat. Entwickl. (N.F.), xiii, pt. 3, 165-167.

—— 1907 E

Evolution as it appears to the paleontologist.

Science (n.s.), xxvi, 744-749.

Abstract in Rev. crit. Paléozool., 13, 150.

—— 1907 F

A paleontological trip to northwestern Nebraska.

Science (n.s.), xxvi, 871-872.

—— 1907 G

Evolution of mammalian molar teeth to and from the triangular type.

8vo., 1-250, 215 text-figs. Edited by W. K. Gregory.

Abstracts in Science (n.s.), xxvii, 341-342; Anat. Record, ii, 221-225; Rev. crit. Paléozool., xii, 223; Amer. Jour. Sci. (4), xxv, 264; Jahresber. Anat. Entwickl. (N.F.), xiv, pt. 3, 161.

—— 1907 H

The reclassification of the Mammalia.

Ann. N. Y. Acad. Sci., xvii, 611-613.

Osborn, H. F.—Continued 1907 I

Foreword to the monographs on vertebrate palæontology.

U. S. Geol. Surv. Mon., xlix, pages xiii-xv.

—— 1907 J

Explorations of John Bell Hatcher for the paleontological monographs of the United States Geological Survey, together with a statement of his contributions to American geology and paleontology. A biographical sketch of John Bell Hatcher.

U. S. Geol. Surv. Mon., xlix, pages xvii-xxvi.

This sketch contains a list of Hatcher's scientific papers.

—— 1907 K

Hunting the ancestral elephant in the Fayûm Desert.

Cent. Mag., lxxiv (n.s. lii), 815-835, 20 illustrations.

Brief abstract in Geol. Centralbl., xi, 28. Abstract in Sci. Progress, ii, 503.

—— 1908 A

New or little known titanotheres from the Eocene and Oligocene.

Bull. Amer. Mus. Nat. Hist., xxiv, 599-617, 21 text-figs.

Abstracts in Geol. Centralbl., xiii, 395-396; Rev. crit. Paléozool., xiii, 143; Amer. Jour. Sci. (4), xxix, 90.

—— 1908 B

The four inseparable factors of evolution. Theory of their distinct and combined action in the transformation of the titanotheres, an extinct family of hoofed animals in the order of Perissodactyla.

Science (n.s.), xxvii, 148-150.

Abstract in Rev. crit. Paléozool., xiii, 150.

—— 1908 C

Dolicocephaly and brachycephaly in titanotheres.

Science (n.s.), xxvii, 255.

—— 1908 D

Coincident evolution through rectigradations and fluctuations.

Science (n.s.), xxvii, 749-752, 3 text-figs.

Abstract in Rev. crit. Paléozool., xiii, 150.

—— 1909 A

Communications and remarks before American Society of Vertebrate Paleontologists.

Science (n.s.), xxix, 197-198.

Osborn, H. F.—Continued 1909 B

The epidermis of an iguanodont dinosaur.

Science (n.s.), XXIX, 793-795.

Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 298.

—— 1909 C

The upper Cretaceous iguanodont dinosaurs.

Nature, LXXXI, 160-162, 2 figs. See also note on pages 194-195.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 321; Geol. Centralbl., XIII, 438.

—— 1909 D

Cenozoic mammal horizons of western North America.

Bull. U. S. Geol. Surv., CCCLXI, 1-90, 3 pls. and 15 text-figs.

A bibliography occupies pages 9-18.

Abstracts in Amer. Jour. Sci. (4), XXIX, 88-89; Geol. Centralbl., XIII, 393-394; Rev. crit. Paléozool., XIII, 147-149; Jour. Geol., XIX, 95.

—— 1909 E

The feeding habits of *Mœritherium* and *Palæomastodon*.

Nature, LXXXI, 139-140, 2 figs.

—— 1910 A

Correlation of the Cenozoic through its mammalian life.

Jour. Geol., XVIII, 201-215, 4 figs.

Reprinted in Bailey Willis and R. D. Salisbury's "Outlines of Geologic History," Univ. of Chicago Press, 1910, pages 251 to 264.

Abstract in Geol. Centralbl., XVI, 49.

—— 1910 B

The age of mammals in Europe, Asia and North America.

New York, The Macmillan Co., 8vo., i-xvii+1-635 pages, with 220 figs. Pages 515-563 form an appendix in which is presented a classification of the Mammalia.

Reviews in Amer. Jour. Sci. (4), XXXI, 150-151, Amer. Mus. Jour., XI, 1911, 65-67; Sci. Progress, V, 660; Bull. Amer. Geogr. Soc., XLIII, 541; Rev. crit. Paléozool., XV, pages i-xii; Geol. Centralbl., XIX, 393; Nature, LXXXVIII, 135-136; Amer. Mus. Jour., XI, 65; Bull. Amer. Geogr. Soc., XLIII, 541.

Abstract in Winge, H., 1923 A, p. 185.

—— 1910 C

Paleontologic evidences of adaptive radiation.

Pop. Sci. Month., LXXVII, 77-81.

Osborn, H. F.—Continued 1910 D

Evolution as it appears to the paleontologist.

Proc. internat. Zool. Congr., VII, Boston, 1907, 733-739.

Issued also as a reprint, 1-7; also same as Osborn, H. F., 1907 E.

—— 1911 A

Biological conclusions drawn from the study of the titanotheres.

Science (n.s.), XXXIII, 825-828.

—— 1911 B

A dinosaur mummy.

Amer. Mus. Jour., XI, 7-11, 4 figs.

Abstracts in Geol. Centralbl., 42; Nature, LXXXV, 520; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 209; Sci. Progress, VI, 568, fig.

—— 1911 C

Palæontology.

Encyclop. Brit., ed. 11, XX, 559-591, 10 figs.

—— 1912 A

Craniometry of the Equidæ.

Mem. Amer. Mus. Nat. Hist. (n.s.), I, pt. III, 55-100, 17 text-figs.

Abstract in Geol. Centralbl., XIX, 651; Rev. crit. Paléozool., XVII, 203.

—— 1912 B

The continuous origin of certain unit characters as observed by a paleontologist.

Amer. Naturalist, XLIV, 185-206, 249-278, 8 text-figs.

—— 1912 C

Phylogeny and ontogeny of the horns of mammals.

Science (n.s.), XXXV, 595-596.

—— 1912 D

Skull measurements in man and the hoofed mammals.

Science (n.s.), XXXV, 596.

—— 1912 E

Tetraplasy, a law of the four inseparable factors of evolution.

Proc. Acad. Nat. Sci. Phila., LXIV, 144-146.

—— 1912 F

Tetraplasy, the law of the four inseparable factors of evolution.

Jour. Acad. Nat. Sci. Phila. (2), XV, 277-309.

Abstract in Rev. crit. Paléozool., XVII, 195.

Osborn, H. F.—Continued 1912 G

Symposium on ten years progress in vertebrate paleontology. Correlation and paleogeography.

Bull. Geol. Soc. Amer., XXIII, 232-256, 11 text-figs.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Williston and Sinclair.

—— 1912 H

Evolution as it appears to the paleontologist.

Proc. internat. Zool. Congr., VII, Boston, 1907, 733-739.

—— 1912 I

A means of estimating the age of the mastodon and other Proboscidea.

Proc. internat. Zool. Congr., VII, Boston, 1907, 782-784, figs. 1-3.

—— 1912 J

Crania of *Tyrannosaurus* and *Allosaurus*.

Mem. Amer. Mus. Nat. Hist. (n.s.), I, 1-30, pls. i-iv, 27 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, 335; Geol. Centralbl., XIX, 445; Sci. Progress, VIII, 14; Rev. crit. Paléozool., XVII, 130; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 210; Nature, XC, 313.

—— 1912 K

Integment of the iguanodont dinosaur *Trachodon*.

Mem. Amer. Mus. Nat. Hist. (n.s.), I, 33-54, pls. v-x, 13 text-figs.

For abstracts see Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 334-335; Geol. Centralbl., XIX, 445-446.

—— 1912 L

The continuous origin of certain unit characters as observed by a paleontologist.

Harvey Lect., ser. 1911-1912, 153-204, 8 figs.

Review in Geol. Mag. (6), I, 125-126.

—— 1913 A

Tyrannosaurus, restoration and model of the skeleton.

Bull. Amer. Mus. Nat. Hist., XXXII, 91-92, pls. iv-vi.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 468; Rev. crit. Paléozool., XXI, 47; Geol. Zentralbl., XXI, 265.

Osborn, H. F.—Continued 1913 B

Eomoropus, an American Eocene chalicothere.

Bull. Amer. Mus. Nat. Hist., XXXII, 261-274, 11 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 140; Rev. crit. Paléozool., XIX, 1; XXI, 48; Geol. Zentralbl., XXI, 238; Nature, XCIII, 333.

—— 1913 C

Lower Eocene titanotheres. Genera *Lambdotherium, Eotitanops*.

Bull. Amer. Mus. Nat. Hist., XXXII, 407-415, 9 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 140; Sci. Progress, VIII, 635; Rev. crit. Paléozool., XIX, 6, 101; XXI, 50; Geol. Zentralbl., XXI, 234.

—— 1913 D

The skull of *Bathyopsis*, Wind River uintathere.

Bull. Amer. Mus. Nat. Hist., XXXII, 417-420, pls. lxiv-lxvi, 4 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 141; Sci. Progress, VIII, 635; Rev. crit. Paléozool., XIX, 1, 101; XXI, 50; Geol. Zentralbl., XXI, 266; Nature, XCII, 514.

—— 1914 A

Close of the Cretaceous and opening of Eocene time in North America.

Bull. Geol. Soc. Amer., XXV, 321-323.

—— 1914 B

Recent results in the phylogeny of the titanotheres.

Bull. Geol. Soc. Amer., XXV, 403-405, 1 text-fig.

A brief abstract is found on page 137 of the same volume. Abstract in Neues Jahrb. Min. Geol. Pal., 1919, Ref., 217-218.

—— 1914 C

New methods of restoring *Eotitanops* and *Brontotherium*.

Bull Geol. Soc. Amer., XXV, 406, 1 text-fig.

—— 1914 D

Restoration of the world series of elephants and mastodons.

Bull. Geol. Soc. Amer., XXV, 407-410, 2 text-figs.

—— 1914 E

Rectigradations and allometrons in relation to the conceptions of the "mutations of Waagen," of species, genera, and phyla.

Bull. Geol. Soc. Amer., XXV, 411-416, 3 tables.

Osborn, H. F.—Continued 1915 A

Close of Jurassic and opening of Cretaceous time in North America.

Bull. Geol. Soc. Amer., XXVI, 295-302, 1 text-fig.

—— 1915 B

Origin of single characters as observed in fossil and living animals and plants.

Amer. Naturalist, XLIX, 193-240, 10 text-figs.

Abstracts in Nature, XCV, 550-551; Rev. crit. Paléozool., XXI, 1.

—— 1915 C

Review of the Pleistocene of Europe, Asia, and Africa.

Ann. N. Y. Acad. Sci., XXVI, 215-315.

—— 1915 D

The origin of new adaptive characters.

Nature, XCVI, 284-285.

Followed by a response on the part of the reviewer.

—— 1915 E

The dinosaurs of the Bone Cabin quarry.

Amer. Mus. Nat. Hist. Handbook No. 5, 131-152, with figures.

—— 1916 A

Two new Oligocene titanotheres.

Bull. Amer. Mus. Nat. Hist., XXXV, 721-723, 2 text-figs.

—— 1916 B

Men of the Old Stone age; their environment, life and art. Illustrations by Upper Palæolithic artists and Charles R. Knight, Erwin S. Christman, and others.

Second edition. 8vo., i-xxvii+1-545 pages, 8 plates, 268 text-figs.

Pages 513-532 are the bibliography.

Reviews in L'Anthrop. Paris, XXVIII, 1917, 427-430; Nature, XCVIII, 45.

—— 1916 C

Additional characters of *Tyrannosaurus* and *Ornithomimus* (Abstract).

Bull. Geol. Soc. Amer., XXVII, 150-151.

—— 1916 D

Pelvis and sacrum of *Camarasaurus* (Abstract).

Bull. Geol. Soc. Amer., XXVII, 151.

—— 1916 E

The origin and evolution of life upon the earth.

Scient. Monthly, III, 5-22, 170-190, 289-307, 313-334, 502-513, 601-614, with 25 figs.

Pages 189, 190, 306, 307, 333, 334 are the bibliography.

Osborn, H. F.—Continued 1917 A

Skeletal adaptations of *Ornitholestes*, *Struthiomimus*, *Tyrannosaurus*.

Bull. Amer. Mus. Nat. Hist., XXXV, 733-771, pls. xxiv-xxvii, 23 text-figs.

Abstracts in Bull. Geol. Soc. Amer., XXVIII, 215; Rev. crit. Paléozool., XXIV, 145; Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 255-256; Geol. Zentralbl., XXVIII, 507; Sci. Progress, XII, 422.

—— 1917 B

The origin and evolution of life. On the theory of action, reaction and interaction of energy.

8vo., i-xxxi+1-322 pages, 136 illustrations.

Published in part in Scient. Monthly, III, 1916, 5-22, 170-190, 289-307, 313-334, 502-513, 601-614; abstract in Amer. Jour. Sci. (4), XLV, 77.

Reviewed in Amer. Mus. Jour., XVIII, 193-199; Science, XLVII, 472-474; Jour. Geol., XXVI, 283-285; Nature, CIII, 201.

—— 1917 C

The "ostrich" dinosaur and the "tyrant" dinosaur.

Amer. Mus. Jour., XVII, 5-13, 10 illustrations.

Note on in Nature, XCIX, 213.

—— 1917 D

Heritage and habitus.

Science (n.s.), XLIV, 660-661.

Abstract in Rev. crit. Paléozool., XXII, 109.

—— 1918 A

Equidæ of the Oligocene, Miocene, and Pliocene of North America; iconographic type revision.

Mem. Amer. Mus. Nat. Hist. (n.s.), II, 1-330, pls. i-xliv, 173 text-figs.

Reviewed in Science (n.s.), XLVIII, 171; Rev. crit. Paléozool., XXII, 55-57; Amer. Jour. Sci. (4), XLVI, 770-771; Nat. Hist., XIX, 733; Geol. Mag. (6), V, 518-519; ibid., LVII, 1920, 128-130.

Abstract in Geol. Zentralbl., XXVII, 184; Sci. Progress, XIV, 241.

—— 1918 B

Observations on the skeletons of *Moropus cooki* in the American Museum.

Bull. Geol. Soc. Amer., XXIX, 131-132.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 113.

Review in Rev. crit. Paléozool., XXVII, 31.

—— 1918 C

A long-jawed mastodon skeleton from South Dakota and phylogeny of the Proboscidea.

Bull. Geol. Soc. Amer., XXIX, 133-137, with a phylogenetic table.

Abstract in Rev. Géol. et Sci. conn., IV, 1923, 114.

Osborn, H. F.—Continued 1918 D
Samuel Wendell Williston.
Jour. Geol., xxvi, 673-689.

—— 1919 A
Memorial of Samuel Wendell Williston.
Bull. Geol. Soc. Amer., xxx, 66-76, portrait.

—— 1919 B
New titanotheres of the Huerfano.
Bull. Amer. Mus. Nat. Hist., xli, 557-569, 7 figs.
Abstract in Rev. Géol. et Sci. conn., 1923, 111.
Review in Rev. crit. Paléozool., xxvii, 29.

—— 1919 C
Seventeen skeletons of *Moropus;* probable habits of this animal.
Proc. Nat. Acad. Sci., v, 250-252, 1 fig.
Abstract in Rev. Géol. et Sci. conn., iv, 1923, 114; nature, cvi, 252.
Review in Rev. crit. Paléozool., xxvii, 32.

—— 1919 D
Palæomastodon, the ancestor of the long-jawed mastodons only.
Proc. Nat. Acad. Sci., v, 265-266, with 1 fig.
Abstracts in Rev. Géol. et Sci. conn., iv, 1923, 115; Nature, cvi, 252.

—— 1920 A
The hall of the age of man in the American Museum.
Nat. Hist., xx, 228-246, with 14 illustrations.

—— 1921 A
The evolution, phylogeny, and classification of the Proboscidea.
Amer. Mus. Novit., i, 1-15, 15 illustrations.
Abstracts in Rev. Géol. et Sci. conn., iv, 1923, 112; Sci. Progress, xvi, 214.
Review in Rev. crit. Paléozool., xxvii, 29.

—— 1921 B
First appearance of the true mastodon in America.
Amer. Mus. Novit., x, 1-6, 2 figs.
Abstracts in Rev. Géol. et Sci. conn., iv, 1923, 117; Sci. Progress, xvi, 214.
Review in Rev. crit. Paléozool., xxvii, 34.

—— 1921 C
The first appearance of the true mastodon in America.
Science (n.s.), liv, 108.
Abstract in Rev. Géol. et Sci. conn., iv, 1923, 115-116.

Osborn, H. F.—Continued 1921 D
Resemblances and contrasts between zoologic and palæontologic research in mammalogy. Desirability of uniform standards and systems in classification, in description, in measurement, in reasoning.
Jour. Mamm., ii, 1-11, with figs. 1, 2.

—— 1921 E
Adaptive radiation and classification of the Proboscidea.
Proc. Nat. Acad. Sci., vii, 231-234, 1 diagram.
Review in Rev. crit. Paléozool., xxvii, 79.

—— 1922 A
Hesperopithecus, the first anthropoid primate found in America.
Amer. Mus. Novit., xxxvii, 1-5, 3 figs.
Abstracts in Rev. Géol. et Sci. conn., v, 110; Rev. crit. Paléozool., xxviii, 5, 1924; Geol Zentralbl., xxix, 125.

—— 1922 B
Species of American Pleistocene mammoths. *Elephas jeffersonii,* new species.
Amer. Mus. Novit., No. 41, 1-16, 12 figs.
Abstracts in Geol. Zentralbl., xxviii, 375; Neues Jahrb. Min. Geol. Pal., 1923, i, 325.

—— 1922 C
Hesperopithecus, the first anthropoid primate found in America.
Science (n.s.), lv, 463-465.
The same as Osborn, H. F., 1922 A, but without figures. Abstract in Amer. Jour. Sci. (4), iii, 478.
Review in Rev. crit. Paléozool., xxviii, 5.

—— 1922 D
Proving Asia the mother of the continents.
Asia, xxii, 721-724, 5 figs.

—— 1922 E
Hesperopithecus, the anthropoid primate of western Nebraska.
Nature, cx, 281-283, 2 figs.

—— 1922 F
Dibelodon edensis (Frick) of Southern California, *Miomastodon* of the Middle Miocene, new genus.
Amer. Mus. Novit., xlix, 1-4, 1 fig.
Abstract in Rev. crit. Paléozool., xxvii, 216.

—— 1922 G
Migrations and affinities of the fossil proboscideans of North and South America and Africa.
Amer. Naturalist, lvi, 448-455.

Osborn, H. F.—Continued 1922 H

Pliocene (Tertiary) and early Pleistocene (Quaternary) Mammalia of East Anglia, Great Britain, in relation to the appearance of man.

Geol. Mag., LIX, 433-441.

Contains lists of fossil vertebrates by A. C. Savin.

Abstract in Rev. crit. Paléozool., XXVII, 219.

—— 1923 A

Mastodons of the Hudson Highlands.

Nat. Hist., XXIII, 3-24, with numerous illustrations.

—— 1923 B

Titanotheres and lophiodonts in Mongolia.

Amer. Mus. Novit., XCI, 1-5, 2 figs.

—— 1923 C

A new genus and species of Ceratopsia from New Mexico, *Pentaceratops sternbergii*.

Amer. Mus. Novit., XCIII, 1-3, 1 fig.

Abstracts in Rev. crit. Paléozool., XXVIII, 102, 1924; Geol. Zentralbl., XXX, 447.

—— 1923 D

Two Lower Cretaceous dinosaurs of Mongolia.

Amer. Mus. Novit., XCV, 1-10, 5 figs.

—— 1923 E

New subfamily generic and specific stages in the evolution of the Proboscidea.

Amer. Mus. Novit., XCIX, 1-4.

—— 1923 F

The extinct giant rhinoceros *Baluchitherium* of western and central Asia.

Nat. Hist., XXIII, 209-228, with illustrations.

—— 1923 G

Cadurcotherium from Mongolia.

Amer. Mus. Novit., XCII, 1-2.

—— 1924 A

Joseph Leidy, founder of vertebrate paleontology in America.

Science (n.s.), LIX, 173-176.

—— 1924 B

Psittacosaurus and *Protiguanodon:* Two Lower Cretaceous iguanodonts from Mongolia.

Amer. Mus. Novit., CXXVII, 1-16, 9 figs.

—— 1924 C

Three new Theropoda, *Protoceratops* zone, central Mongolia.

Amer. Mus. Novit., CXLIV, 1-12, figs. 1-8.

Osborn, H. F.—Continued 1924 D

Eudinoceras, Upper Eocene amblypod of Mongolia.

Amer. Mus. Novit., CXLV, 1-5, 2 figs.

—— 1924 E

Andrewsarchus, giant mesonychid of Mongolia.

Amer. Mus. Novit., CXLVI, 1-5, 3 figs.

—— 1924 F

Serridentinus and *Baluchitherium*, Loh formation, Mongolia.

Amer. Mus. Novit., CXLVIII, 1-5, 2 figs.

—— 1924 G

Parelephas in relation to phyla and genera of the family Elephantidæ.

Amer. Mus. Novit., CLII, 1-7, 2 figs.

—— 1924 H

Additional generic and specific stages in the evolution of the Proboscidea.

Amer. Mus. Novit., CLIV, 1-5, 2 figs.

—— 1924 I

Sauropoda and Theropoda of the Lower Cretaceous of Mongolia.

Amer. Mus. Novit., CXXVIII, 1-7, 7 figs.

—— 1924 J

Factors in the evolution and phylogeny of the Proboscidea.

Anat. Record, XXIX, 114.

—— 1924 K

Asiatic center of mammalian dispersion.

Pan-Amer. Geol., XLI, 271-275.

—— 1924 L

The discovery of an unknown continent.

Nat. Hist., XXIV, 133-149, 11 illustrations.

—— 1925 A

The elephants and mastodonts arrive in America.

Nat. Hist., XXV, 3-23, 18 figs.

—— 1925 B

Final conclusions on the evolution, phylogeny, and classification of the Proboscidea.

Proc. Amer. Philos. Soc., LXIV, 17-35, 3 figs.

—— 1925 C

The origin of species. II: Distinctions between rectigradations and allometrons.

Proc. Nat. Acad. Sci., XI, art. 12, 749-752.

Osborn, H. F.—Continued 1925 D

Mammals and birds of the California tar pools, Rancho La Brea and McKittrick.

Nat. Hist., xxv, 527-543, colored plate, 13 text-figs.

Reviewed in Science (n.s.), lxiv, 426.

—— 1925 E

Upper Eocene and Lower Oligocene titanotheres of Mongolia.

Amer. Mus. Novit., ccii, 1-12.

—— 1925 F

The origin of species as revealed by vertebrate palæontology.

Nature, cxv, 925-926, 961-963.

—— 1926 A

The origin of species. 1859-1925.

Scient. Monthly, xxii, 185-192.

Published in Yale Mus. Bull., vol. i, No. 1.

—— 1926 B

Additional new genera and species of the mastodontoid Proboscidea.

Amer. Mus. Novit., ccxxxviii, 1-16, 12 figs.

The bibliography includes 9 titles.

—— 1926 C

The problem of the origin of species as it appeared to Darwin in 1859 and as it appears to us today.

Science (n.s.), lxiv, 337-341.

—— 1927 A

Recent discoveries relating to the origin and antiquity of man.

Science (n.s.), lxv, 481-488.

——, and H. E. **Anthony** 1922 A

Close of the age of the mammals.

Jour. Mamm., iii, 219-237, 6 figs. Followed by a discussion by prominent mammalogists.

The bibliography presents 15 titles.

——, and Walter **Granger** 1901 A

Fore and hind limbs of *Sauropoda* from the Bone Cabin quarry.

Bull. Amer. Mus. Nat. Hist., xiv, 199-208, 6 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, i, Ref., 157-158; Geol. Centralbl., ii, 763; Rev. crit. Paléozool., vii, 14.

——, and W. D. **Matthew** 1909 A

Geological correlation through vertebrate palæontology by international co-operation.

Ann. N. Y. Acad. Sci., xix, 41-44.

Osborn, H. F., and C. C. **Mook** 1917 A

Skeleton and restoration of *Camarasaurus*.

Bull. Geol. Soc. Amer., xxviii, 215 (Abstract).

—— —— 1919 A

Characters and restoration of the sauropod genus *Camarasaurus* Cope.

Proc. Amer. Philos. Soc., lviii, 386-396, pl. i, 3 text-figs.

Abstract in Rev. Géol. et Sci. conn., iv, 1923, 110-111; Nature, cvi, 252.

Review in Rev. crit. Paléozool., xxvii, 28.

—— —— 1920 A

Reconstruction of the skeleton of the sauropod dinosaur *Camarasaurus* Cope (*Morosaurus* Marsh).

Proc. Nat. Acad. Sci., vi, 15.

Abstract in Geol. Zentralbl., xxv, 540.

—— —— 1921 A

Camarasaurus, *Amphicœlias*, and other sauropods of Cope.

Mem. Amer. Mus. Nat. Hist. (n.s.), iii, 247-287, pls. lx-lxxxv, 127 text-figs.

There is a bibliography of 28 titles.

Review in Rev. crit. Paléozool., xxvii, 151.

Osburn, Raymond C. 1903 A

Adaptation to aquatic, arboreal, fossorial and cursorial habits in mammals.

Amer. Naturalist, xxxvii, 651-665.

Notice in Neues Jahrb. Min. Geol. Pal., 1906, i, Ref., 134-136.

—— 1906 A

Adaptive modifications of the limb skeleton in aquatic reptiles and mammals.

Ann. N. Y. Acad. Sci., xvi, 447-482, pls. vii-ix.

—— 1906 B

The function of the fins of fishes.

Science (n.s.), xxiii, 585-587.

See also Bull. N. Y. Zool. Soc. No. 25, 347-348.

—— 1907 A

The origin of vertebrate limbs. Recent evidence upon this problem from studies on primitive sharks.

Ann. N. Y. Acad. Sci., xvii, 415-436.

—— 1907 B

Observations on the origin of the paired limbs of vertebrates.

Amer. Jour. Anat., vii, 171-194, pls. i-v.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xiii, pt. 3, 117-119.

Osgood, W. H. 1900 A
Revision of the pocket mice of the genus *Perognathus.*
N. A. Fauna, No. XVIII, 1-72, pls. i-iv, 15 text-figs.
Reviewed in Science (n.s.), XXX, 119.

—— 1905 A
Scaphoceros tyrrelli, an extinct ruminant from the Klondike gravels.
Smithson. Misc. Coll., XLVIII, 173-183, pls. xxv-xlii.
Abstract in Rev. crit. Paléozool., 13, 74.

—— 1905 B
Mastodon remains in the Yukon Valley.
Proc. Biol. Soc. Wash., XVIII, 254-255.

—— 1905 C
An extinct ruminant related to the musk-ox.
Science (n.s.), XXI, 788.

—— 1905 D
Symbos, a substitute for *Scaphoceros.*
Proc. Biol. Soc. Wash., XVIII, 223-224.

—— 1907 A
A specimen of *Bison occidentalis* from northwest Canada.
Proc. Biol. Soc. Wash., XX, 65.

—— 1909 A
Revision of the mice of the American genus *Peromyscus.*
N. A. Fauna, No. XXVIII, 1-285, pls. i-viii, 12 text-figs.
Reviewed in Science (n.s.), XXX, 119-121; Amer. Naturalist, XLIII, 633-639.

—— 1913 A
The name of the Rocky Mountain sheep.
Proc. Biol. Soc. Wash., XXVI, 57-62.

Osmont, Vance C. 1904 A
A geological section of the coast ranges north of the Bay of San Francisco.
Bull. Dept. Geol. Univ. Calif., LV, 39-87, pls. vi, vii.

Oswald, Ferdinand 1851 A
Ueber einen Fund von siebenzehn Zähnen des *Ptychodus latissimus* in einer Plänerkalkgrube bei Teplitz.
Zeitschr. deutsch. Geol. Ges., III, 531-535.

Oswald, Felix 1909 A
The degeneration of armour in animals.
Sci. Progress, 122-134, 23 illustrations.
Brief extract in Nature, LXXXI, 167.

—— 1911 A
The sudden origin of new types.
Sci. Progress, V, 396-430, 20 text-figs.

Otto, Hans 1908 A
Die Beschuppung der Brevilinguier und Ascalaboten.
Jena. Zeitschr. Naturwiss., XLIV (XXXVII), 193-252, pl. ix, 28 text-figs.
Appended is a bibliography of 27 titles.

Owen, D. D. 1856 A
Letter to Joseph Leidy regarding bones of *Megalonyx* found at Henderson, Ky.
Rep. Geol. Surv. Kentucky, I, 23.

—— 1857 B
Mammoth bones, etc., at Eminence, Henry County [Kentucky].
Rep. Geol. Surv. Kentucky, III, 100.

Owen, Luella A. 1926 A
Later studies on the loess.
Pan-Amer. Geol., XLV, 377-382.

Owen, R. 1839 E
A description of Viscount Cole's specimen of *Plesiosaurus macrocephalus.*
Ann. Nat. Hist., II, 64-68.

—— 1839 F
Description d'une dent et d'une portion de squelette du *Glyptodon,* grand quadrupède de l'ordre des édentés, auquel appartient l'armure osseuse tesselée figurée par M. Clift dan son mémoire sur les restes du mégathérium.
Ann. Sci. nat. (2), XII, 156-164.
Reprinted from Proc. Geol. Soc. Lond. 27, Feb. 1839.

—— 1839 G
Recherches sur la structure et la formation des dents des squaloïdes, et application des faits observés à une nouvelle théorie du développement des dents.
Ann. Sci. Nat. (2), XII, 209-220, pl. ix.
Reprinted in Froriep's Neue Notizen, XVII, 1841, 84-87, figs. See also C. R. Acad. Paris, Dec. 16, 1839; Froriep's Notizen, XIII, 81-85.

—— 1839 H
Sur la structure microscopique et le développement des dents des poissons gymnodontes.
Ann. Sci. Nat. (2), XII, 347-352.

—— 1840 H
Sur la structure intime et le développement des dents poissons gymnodontes.
C. R. Acad. Sci. Paris, X, 74-78.

Owen, R.—Continued 1840 I

A description of some of the soft part, with the integument of the hind-fin, of the *Ichthyosaurus*, indicating the shape of the fin when recent.

Proc. Geol. Soc. Lond., III, 157-158.

See also Froriep's Notizen, XVI, 1849, cols. 199-200.

—— 1841 G

Outlines of a classification of the Marsupialia.

Trans. Zool. Soc. Lond., II, 315-333.

—— 1841 H

On the osteology of the Marsupialia.

Trans. Zool. Soc. Lond., II, 379-408, pls. lxviii-lxxi.

—— 1842 F

On British fossil reptiles.

Edinb. New Philos. Jour., XXXIII, 65-88.

Reprinted from the report of the Plymouth meeting, Brit. Assoc. Adv. Sci., 1841, 191.

—— 1842 G

Notes on the anatomy of the Nubian giraffe.

Trans. Zool. Soc. Lond., II, 217-248, pls. xl-xliv.

Osseous system on pages 234-239.

—— 1843 C

Zoological summary of the extinct and living animals of the order Edentata.

Edinb. New Philos. Jour., XXXV, 353-361.

—— 1843 D

Description of the fossil tympanic bones referable to four distinct species of *Balæna*.

Proc. Geol. Soc. Lond., IV, 283-286, 1 fig.

—— 1844 B

Description of a fossil molar tooth of a mastodon discovered by Count Strzlecki in Australia.

Ann. Mag. Nat. Hist. (1), XIV, 268-271.

Describes *Mastodon australis*, on a specimen now believed to have been found in South America or Mexico.

—— 1844 C

Characters of a new species of axolotl.

Ann. Mag. Nat. Hist. (1), XIV, 23, 1 fig.

—— 1845 D

Abstracts in Edinb. New Philos. Jour., XXXIX, 334-339; Quart. Jour. Geol. Soc., I, 318-322.

—— 1845 E

Sur la classification et les analogies des dents molaires des carnivores.

Ann. Sci. Nat. (3), III, 116-128.

Owen, R.—Continued 1845 F

Appendix to Professor Henslow's paper, consisting of a description of the fossil tympanic bones referable to 4 distinct species of *Balæna*.

Geol. Mag., I, 37-40, 1 fig.

—— 1846 E

Lectures on the comparative anatomy and physiology of the vertebrate animals. Pt. I: Fishes.

8vo., i-xi+1-304 pages, 81 figs.

The bibliography presents 138 titles.

—— 1848 B

The archetype and homologies of the vertebrate skeleton.

8vo., London, i-viii+1-203 pages, 2 pls., 3 tables, and 28 text-figs.

A reprint of Owen, R., 1847 B, with additional facts and illustrations.

—— 1849 D

On the structure of the teeth of some fossil fish of the Carboniferous period.

Ann. Mag. Nat. Hist. (2), III, 41-42.

—— 1851 C

For title and citation see Hay, O. P., 1902 A, p. 188. Abstracts in Lond. Edinb. Dublin Philos. Mag. (4), I, 250-253; Froriep's Tagsber., II, 97-101.

—— 1851 D

Comparison of the modifications of the osseus structure of the *Megatherium*, with that in other known existing and extinct species of the class Mammalia.

Edinb. New Philos. Mag., LI, 350-357.

Translation in Froriep's Tagsber., II, 225-230.

—— 1855 D

Note on some remains of an *Ichthyosaurus* discovered by Captain Sir Edward Belcher, C. B. R. N., at Exmouth Island in lat. 77° 16′ N., long. 96° W.

In Belcher's The last of the Arctic voyages, II, 389-391, pl. xxxi, map.

—— 1855 E

On the anthropoid apes and their relations to man.

Proc. Roy. Instn. G. Brit., II, 26-41.

—— 1857 E

On the characters, principles of division, and primary groups of the class Mammalia.

Jour. Linn. Soc. Lond., II, 1-37, 6 text-figs.

Owen, R.—Continued 1857 F

On the affinities of the *Stereognathus ooliticus* (Charlesworth), a mammal from the Oolitic slate of Stonesfield.

Quart. Jour. Geol. Soc., XIII, 1-11. Also in Arch. Sci. Phys. Nat., XXXV, 191-205.

—— 1857 G

On the fossil vertebra of a serpent (*Laophis crotaloides*, Ow.) discovered by Capt. Spratt, R. N., in a Tertiary formation in Salonica.

Quart. Jour. Geol. Soc., XIII, 196-199, pl. iv.

—— 1858 A

On the characters, principles of division, and primary groups of the class Mammalia.

Proc. Linn. Soc. Lond., Zool., II, 1-37, 6 text-figs.

—— 1859 E

On the vertebral column of the order Pterosauria (Ow.) as exemplified in the genera *Pterodactylus* (Cuv.) and *Dimorphodon* (Ow.).

Proc. Roy. Soc. Lond., IX, 703-704 (Abstract).

—— 1859 F

On some reptilian remains from South Africa.

Edinb. New Philos. Jour., X, 289-291.

—— 1860 A

On the orders of fossil Reptilia and their distribution in time.

Rep. Brit. Assoc. Adv. Sci., XXIX, Aberdeen, 1859, 153-166.

—— 1861 A

A monograph of a fossil dinosaur (*Scelidosaurus harrisonii* Owen) of the Lower Lias.

Palaeont. Soc. Mon. Brit. Foss. Reptilia of the Liassic formation. Pt. I, 1-14, pls. i-vi.

—— 1862 B

On the cervical and lumbar vertebrae of the mole (*Talpa europæa*).

Rep. Brit. Assoc. Adv. Sci., 1861 (1862), 152-154.

—— 1863 B

A monograph of a fossil dinosaur (*Scelidosaurus harrisonii* Owen) of the Lower Lias.

Palaeont. Soc. Mon.-Brit. Foss. Reptilia of the Liassic formation. Pt. II, 1-26, pls. i-xi.

Owen, R.—Continued 1869 B

On the distinction between *Castor* and *Trogontherium*.

Geol. Mag., VI, 49-56, pl. iii, 4 text-figs.

—— 1869 C

Description of a great part of a jaw with the teeth of *Strophodus medius*, Ow., from the Oolite of Caen, in Normandy.

Geol. Mag., VI, 193-196; 235-236, pl. vii, and a text-fig.

Abstract in Neues Jahrb. Min. Geol. Pal., 1870, 1035.

—— 1869 D

On some Indian Cetacea collected by Walter Elliott, Esq.

Trans. Zool. Soc. Lond., VI, 17-47, pls. iii-xiv.

—— 1869 E

Description of the cavern of Bruniquel, and its organic contents.

Phil. Trans. Roy. Soc. Lond., CLIX, pt. 1, 517-557, pls. lvii-lx, 9 text-figs.

—— 1869 F

On the remains of a large extinct lama (*Palauchenia magna*, Ow.), from Quaternary deposits in the valley of Mexico.

Proc. Roy. Soc. Lond., XVII, 405-406.

—— 1870 D

Monograph on the British fossil Cetacea of the Red Crag.

Palaeont. Soc. Mon., pp. 1-40, pls. i-iv, 14 text-figs.

Same as Owen, R., 1889 A, wrongly dated.

—— 1873 B

Discussion on *Hypsilophodon foxii*.

Quart. Jour. Geol. Soc., XXIX, 531-532.

—— 1876 D

Descriptive and illustrated catalogue of the fossil Reptilia of South Africa in the collection of the British Museum.

4to. London, i-xii+1-88 pages, pls. i-lxx.

—— 1876 E

On the new modification of dinosaurian vertebræ.

Quart. Jour. Geol. Soc., XXXII, 43-46, pls. iv, v.

—— 1878 E

On *Argillornis longipennis* Ow., a large bird of flight from the Eocene clay of Sheppey.

Quart. Jour. Geol. Soc., XXXIV, 124-130, pl. vi.

Owen, R.—Continued 1879 C

On *Hypsiprimnodon* Ramsay, a genus indicative of a distinct family (Pleopodidæ) in the diprotodont section of the Marsupialia.

Trans. Linn. Soc. Lond. (2), I, 573-582, pls. lxxi, lxxii, 3 text-figs.

—— 1879 D

On the association of dwarf crocodiles (*Nannosuchus* and *Theriosuchus pusillus*, e. g.) with diminutive mammals of the Purbeck shales.

Quart. Jour. Geol. Soc., XXXV, 148-155, pl. ix.

—— 1880 B

On the skull of *Argillornis longipennis* Ow.

Quart. Jour. Geol. Soc., XXXVI, 23-26, pl. ii.

—— 1883 A

See Hay, O. P., 1902 A, p. 192.

Abstract in Ann. Mag. Nat. Hist. (5), II, 372.

—— 1885 A

Note on the resemblance of the upper teeth of an Eocene mammal (*Neoplagiaulax* Lemoine) to those of *Tritylodon*.

Quart. Jour. Geol. Soc., XLI, 28-29, figs. 1-3.

See also Geol. Mag. (3), II, 43-44.

—— 1885 B

Note on remains of *Elephas primigenius* from one of the Creswell bone-caves.

Quart. Jour. Geol. Soc., XLI, 31-33, 2 figs.

Owen, Richard (of America) 1862 A

Report of a geological reconnaissance of Indiana, 1859-1860.

Pabst, Wilhelm 1896 A

Thierfährten aus dem Oberrothliegenden von Tambach in Thüringen.

Zeitschr. deutsch. Geol. Ges., XLVIII, 638-643, pl. xiv.

—— 1900 A

Beiträge zur Kenntnis der Tierfährten in dem Rothliegenden "Deutschlands."

Zeitschr. deutsch. Geol. Ges., LII, 48-63.
Abstract in Geol. Centralbl., I, 155, 1901.

—— 1905 A

Beiträge zur Kenntnis der Tierfährten in dem Rotliegenden "Deutschlands."

Zeitschr. deutsch. Geol. Ges., LVII, 1-14, 361-379, pls. i-iv, xv-xviii.

Pabst, Wilhelm—Continued 1908 A

Beiträge zur Kenntnis der Tierfährten in dem Rotliegenden "Deutschlands."

Zeitschr. deutsch. Geol. Ges., LX, 325-345.
Abstract in Neues Jahrb. Min. Geol. Pal., 1910, I, 468.

Packard, A. S. 1868 B

Ice-marks and ancient glaciers in the White Mountains.

Amer. Naturalist, I, 260-269.

—— 1904 A

The two chief faunæ of the earth.

Science (n.s.), XIX, 220-221.

Packard, E. L. See **Smith** and **Packard.** 1919 A

Paget, Geoffrey W., and Robert E. **Savage** 1916 A

The growth rings on herring scales.

Proc. Roy. Soc. Lond., LXXXIX, 258-260.

Palacký, J. 1894 A

Über neue Resultäte der Verbreitung der Reptilien.

Verh. Ges. deutsch. Naturf., 1893, II, Pt. I, 129-133.

—— 1898 A

La distribution des ophidiens sur le globe.

Mém. Soc. zool. France, XI, 88-125.

—— 1898 B

Die Verbreitung der Batrachier auf der Erde.

Verh. zool.-bot. Ges. Wien, XLVIII, 374-382.

—— 1899 A

Zur geologischen Geschichte der Affen.

Sitz.-Ber. böhm. Ges. Wiss., 1898, art. XVI, 1-2.

—— 1899 B

Über die Verbreitung der Salamandriden.

Sitz.-Ber. böhm. Ges. Wiss., 1898, art. XXXV, 1-7.

—— 1899 C

Die Verbreitung der Eidechsen.

Zool. Jahrb. Syst., XII, 247-285.

—— 1902 A

Zur Verbreitung der Edentaten.

Sitz.-Ber. böhm. Ges. Wiss., 1901, art. XIII, 1-5.

—— 1902 B

Über Länderfaunen.

Verh. deutsch. Zool. Ges., XII, 1902, 137-152.

Palacký, J.—Continued 1902 C

Die Verbreitung der Meeressäugethiere.

Zool. Jahrb. Syst., xv, 249-266.

—— 1902 D

Die Verbreitung der Mikrochiropteren.

Sitz.-Ber. böhm. Ges. Wiss., 1901, No. xxiv, 1-23.

—— 1903 A

Die Verbreitung der Marsupialien.

Sitz.-Ber. böhm. Ges. Wiss., 1902, art. xviii, 1-7.

—— 1903 B

Die Verbreitung der Ungulaten.

Zool. Jahrb. Syst., xviii, 303-341.

Abstract in Geol. Centralbl., iii, 553.

—— 1903 C

Die Verbreitung der Insectivoren.

Zool. Jahrb. Syst., xviii, 342-350.

—— 1904 A

La distribution géographique des rongeurs sur le globe.

Prag., 1904. (Not seen.)

Pallas, P. S. 1780 A

Observatio de dentibus molaribus fossilibus ignoti animalis, canadensibus analogis, etiam ad Uralense jugam repertis.

Acta Acad. Sci. Petropol., 1777 (1780), i, pt. ii, 213-222, pls. viii, ix.

—— 1788 A

De ossibus mamonteis.

Nova Acta Acad. Sci. Petropol., ii, 259-264, pls. viii, ix.

Palmer, R. W. 1913 A

The brain-case of a fossil ungulate of the genus *Anoplotherium*.

Proc. Zool. Soc. Lond., 1913, 878-893, 8 text-figs.

The bibliography presents 9 titles.

Palmer, T. S. 1903 A

Some new generic names of mammals.

Science (n.s.), xvii, 873.

—— 1904 A

Index generum Mammalium. A list of the genera and families of mammals.

N. A. Fauna, No. xxiii, 1-984.

Review in Rev. crit. Paléozool., ix, 171-173.

—— 1919 A

The discoverer [B. F. Mudge] of the toothed birds of Kansas.

Jour. Wash. Acad. Sci., ix, 657.

Palmer, William 1909 A

Description of a new species of leatherback turtle from the Miocene of Maryland.

Proc. U. S. Nat. Mus., xxxvi, 369-373. pl. xxxi.

Abstracts in Geol. Centralbl., xiv, 491; Rev. crit. Paléozool., 13, 206.

—— 1915 A

Certain Miocene fossils.

Jour. Wash. Acad. Sci., v, 261-262.

Discusses remains of porpoises from Chesapeake Beach, Maryland; but no names were applied to these.

—— 1917 A

The fossil sea-cow of Maryland.

Jour. Wash. Acad. Sci., vii, 120.

—— 1920 A

Note on "*Phocæna occidua*" of Jordan and J. Z. Gilbert.

Jour. Mamm., i, 100.

Pan, Ismael del 1925 A

Restos fósiles de proboscideos existentes en el gabinete de historia natural del Instituto de Toledo.

Bol. Soc. espan. hist. nat., xxv, 345-352. 6 figs.

Pander, C. H., and E.d' **Alton** 1821 A-1838 A

Vergleichende Osteologie. Two volumes.

Oblong folio. Bonn.

Vol. i consists of 12 parts, or Lieferungen; vol. ii, of 2 parts. These were issued at times from 1821 to 1838. The captions, pages, plates, and dates of the parts here follow.

—— —— 1821 A

Das Riesen-Faulthiere. *Bradypus giganteus.*

Vergleich. Osteol., i, Lief. 1, [ii]+1-13 pages, pls. i-vii.

—— —— 1821 B

Die Skelete der Pachydermata.

Vergleich. Osteol., i, Lief. 2, [ii]+1-19 pages, pls. i-xii.

—— —— 1822 A

Die Skelete der Raubthiere.

Vergleich. Osteol., i, Lief. 3, [ii]+1-10 pages, pls. i-viii.

—— —— 1823 A

Die Skelete der Wiederkäuer.

Vergleich. Osteol., i, Lief. 4, [ii]+1-10 pages, pls. i-viii.

—— —— 1823 B

Die Skelete der Nagethiere.

Vergleich. Osteol., i, Lief. 5, [i]+1-11 pages, pls. i-viii.

Pander, C. H., and E.d' **Alton**—Continued 1824 A
Die Skelete der Nagethiere.
II. Vergleich. Osteol., I, Lief. 6, [vi]+1-6 pages, pls. i-x.

—— —— 1824 B
Die Skelete der Vierhänder.
Vergleich. Osteol., I, Lief. 7, [ii]+1-11 pages, pls. i-viii.

—— —— 1825 A
Die Skelete der Zahnlosen Thiere.
Vergleich. Osteol., I, Lief. 8, [i]+1-13 pages, pls. i-viii.

—— —— 1826 A
Die Skelete der Robben und Lamantine.
Vergleich. Osteol., I, Lief. 9, [ii]+1-10 pages, pls. i-vii.

—— —— 1827 A
Die Skelete der Cetaceen.
Vergleich. Osteol., I, Lief. 11, [ii]+1-10 pages, pls. i-vi.

—— —— 1827 B
Die Skelete der straussartigen Vögel.
Vergleich. Osteol., II, Lief. 1, [ii]+1-18 pages, pls. i-vii.

—— —— 1828 A
Die Skelete der Beutelthiere.
Vergleich. Osteol., I, Lief. 2, [ii]+1-10 pages, pls. i-vii.

—— —— 1831 A
Die Skelete der Chiropteren und Insectivoren.
Vergleich. Osteol., I, Lief. 12, [ii]+1-30 pages, pls. i-vii.

—— —— 1838 A
Die Skelete der Raubvögel.
Vergleich. Osteol., II, Lief. 2, [ii]+1-24 pages, pls. i-vii.

Pappenheim, P. 1905 A
Zur biologischen Bedeutung der Säge bei den sogen. Sägefischen (*Pristiophorus* M. H. und *Pristis* Lath.)
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1905, 97-102.

—— 1905 B
Altes und Neues von den Sägefischen.
Aus der Natur., I, 397-402, 6 figs.

Paramore, R. H. 1910 A
The evolution of the pelvic floor in the non-mammalian vertebrates and pronograde mammals.
Lancet, CLXXVIII, 1393-1399, 1459-1467, 19 figs.

Paret, T. Dunkin 1894 A
Letter on Hartman's cave, Stroudsburg, Pennsylvania. Written to H. C. Mercer.
Proc. Acad. Nat. Sci. Phila., 1894, 97.

Parish, Woodbine 1832 A
An account of the discovery of portions of three skeletons of the *Megatherium* in the province of Buenos Ayres in South America.
Phil. Mag. Jour. Sci., I, 233-234.
An abstract of paper read.

Parker, G. H. 1901 A
Correlated abnormalities in the scutes and bony plates of the carapace of the sculptured tortoise.
Amer. Naturalist, XXXV, 17-24, 5 text-figs.

—— 1904 A
The function of the lateral line organs of fishes.
Amer. Naturalist, XXXVIII, 496-497.

—— 1908 A
Special description of the auditory organ and other soft parts [of *Rhadinichthys deani*].
Iowa Geol. Surv., XVIII, 272, fig. 40.

Parker, John D. 1881 A
Memorial of Prof. Benjamin F. Mudge.
Trans. Kansas Acad. Sci., VII, 7-11.

Parker, T. Jeffery 1886 A
On the claspers of *Callorhynchus*.
Nature, XXXIV, 635.

——, and W. A. **Haswell** 1897 A
A text-book of zoology.
Two vols., 8vo., II, i-xx+1-683 pages, figs. 664-1172.

Parker, W. K. 1864 B
Remarks on the skeleton of the *Archæopteryx;* and on the relations of the bird to the reptile.
Geol. Mag., I, 55-57.

—— 1869 A
On the osteology of the kager (*Rhinochetus jubatus*).
Trans. Zool. Soc. Lond., VI, 501-521, pls. xci, xcii.

—— 1873 B
On the development of the face in the sturgeon (*Accipenser sturio*).
Month. Micr. Jour., IX, 254-257, pl. xx.

—— 1875 C
On the morphology of the skull in the woodpeckers (Picidæ) and wrynecks (Yungidæ).
Trans. Linn. Soc. Lond. (2), I, 1-22, pls. i-v.

Parker, W. K.—Continued 1875 D

On the structure and development of the bird's skull.

Trans. Linn. Soc. Lond. (2), I, 99-154, pls. xx-xxvii.

—— 1877 B

On the structure and development of the skull in the urodelous Amphibia.

Phil. Trans. Roy. Soc. Lond., CLXVII, 529-597, pls. xxi-xxix.

—— 1878 C

On the structure and development of the skull in the Lacertilia.

Proc. Roy. Soc. Lond., XXVIII, 214-218.

—— 1879 C

On the development of the skull and its nerves in the green turtle (*Chelone midas*), with remarks on the segmentation seen in the skull of various types.

Proc. Roy. Soc. Lond., XXVIII, 329-346.
Abstract in Nature, XIX, 1879, 593, figs. 1-3.

—— 1880 B

On the structure and development of the skull in the Batrachia.

Nature, XXII, 161-162.
Abstract in Parker, W. K., 1880 A.

—— 1881 B

On the structure of the skull in the chameleons.

Trans. Zool. Soc. London, XI, 77-105, pls. xv-xix.

—— 1881 C

On the structure and development of the skull in sturgeons.

Nature, XXIV, 71.
Abstract of Parker, W. K., 1882 B.

—— 1885 C

On the structure and development of the skull in the Mammalia. Pt. II: Edentata.

Phil. Trans. Roy. Soc. Lond., CLXXVI, 1-119, pls. i-xv.
An extensive bibliography occupies pages 2-6.

—— 1886 A

On the structure and development of the skull in the Mammalia. Pt. III: Insectivora.

Phil. Trans. Roy. Soc. Lond., CLXXVI, 121-275, pls. xvi-xxxix.
There is a bibliography of 23 titles.

—— 1887 B

On the morphology of birds.

Proc. Roy. Soc. Lond., XLII, 52-58.

Parker, W. K.—Continued 1888 A

On the presence of claws in the wings of the Ratitæ.

Ibis (5), VI, 124-128, 4 text-figs.

—— 1888 B

On the secondary carpals, metacarpals, and digital rays in the wings of existing carinate birds.

Proc. Roy. Soc. Lond., XLIII, 322-325.
Abstract in Nature, XXXVII, 334-335.

—— 1888 C

On remnants or vestiges of amphibian and reptilian structures found in the skull of birds, both Carinatæ and Ratitæ.

Proc. Roy. Soc. Lond., XLIII, 397-402.
Abstract in Nature, XXXVII, 501-502.

—— 1888 D

On the vertebral chain of birds.

Proc. Roy. Soc. Lond., XLIII, 465-482.

—— 1890 A

On the morphology of the duck and the auk tribes.

Roy. Irish Acad. Cunningh. Mem., VI, 1-104, pls. i-ix.

——, and G. T. **Bettany** 1877 A

The morphology of the skull.

8vo., London, i-xv+1-368 pages, 86 figs.
Reviewed in Morphol. Jahrb., V, 1879, 397-399.

Parks, William A. 1920 A

Preliminary description of a new species of trachodont dinosaur of the genus *Kritosaurus, Kritosaurus incurvimanus.*

Trans. Roy. Soc. Canada (3), XIII, 51-59, figures 1-13.

—— 1920 B

The osteology of the trachodont dinosaur *Kritosaurus incurvimanus.*

Stud. Univ. Toronto, Geol. ser. No. 11, 1-76, pls. i-vii, 22 text-figs.

—— 1922 A

A new genus and species of dinosaur from the Belly River beds of Alberta.

Science (n.s.), LVI, 174. (A brief abstract; no name.)

—— 1922 B

Parasaurolophus walkeri, a new genus and species of crested trachodont dinosaur.

Univ. Toronto Stud. Geol. ser. No. 13, 1-32, pls. i-ix, 9 text-figs.

Parks, William A.—Continued 1923 A
New species of crested trachodont dinosaur.
Bull. Geol. Soc. Amer., XXXIV, 130 (Abstract).

——— 1923 B
Corythosaurus intermedius, a new species of trachodont dinosaur.
Univ. Toronto Stud., Geol. ser. No. 15, 1-57, pls. i-vi, 13 text-figs.

——— 1924 A
A new antilocaprid from the postglacial of Saskatchewan.
Geol. Soc. Amer. Prelim. lists, 1924, 38.

——— 1924 B
A new genus and species of horned dinosaur from the Cretaceous of Alberta.
Geol. Soc. Amer. Prelim. lists, 1924, 38.

——— 1924 C
Dioplosaurus acutosquameus, a new genus and species of armoured dinosaur; and notes on a skeleton of *Prosaurolophus maximus.*
Univ. Toronto Stud. Geol. ser. No. 18, 1-35, pls. i-v.

——— 1925 A
New antilocaprid from the postglacial of Saskatchewan.
Bull. Geol. Soc. Amer., XXXVI, 225-226 (Abstract).

——— 1925 B
New genus and species of horned dinosaur from Alberta.
Bull. Geol. Soc. Amer., XXXVI, 226.

——— 1925 C
Buried Indian workshop with remains of an extinct mammal.
Bull. Geol. Soc. Amer., XXXVI, 429-434, pl. x.

——— 1925 D
Arrhinoceratops brachyops, a new genus and species of Ceratopsia from the Edmonton formation of Alberta.
Univ. Toronto Stud. Geol. ser. No. 19, 1-15, pls. i, ii.

——— 1928 A
Albertosaurus arctunguis, a new species of theropodous dinosaur from the Edmonton formation of Alberta.
Univ. Toronto Stud. Geol. ser. No. 25, 1-42, pl. i, 20 text-figs.

Parmenter, C. S. 1900 A
Fossil turtle from the Dakota epoch.
Trans. Kansas Acad. Sci., XVI, 67.
No name is applied to this cast of a turtle.

Parsons, F. G. 1901 A
On the muscles and joints of the giant golden mole (*Chrysochloris trevelyani.*)
Proc. Zool. Soc. Lond., 1901, I, 26-34, 1 text-fig.

——— 1903 A
On the meaning of some of the epiphyses of the pelvis.
Jour. Anat. Physiol. Lond., XXXVII, 315-323, 9 text-figs.

Pasquale, Maria 1905 A
Avanzi di *Diodon vetus* nel Miocene inferiore del promontorio di S. Elia presso Cagliari in Sardegna.
Rend. Accad. Sci., Napoli, XLIV (ser. 3, XI), 71-79, 3 figs.
There is given a list of fossil species of *Diodon,* together with the literature of each.

Paterson, A. M. 1901 A
The sternum: Its early development and ossification in man and mammals.
Jour. Anat. Physiol. Lond., XXXV (n.s., XV), 21-32, pls. ii, iii.

——— 1902 A
Development of the sternum and shoulder girdle in mammals.
Brit. Med. Jour., 1902, II, 777.

Patten, William 1894 A
On structures resembling dermal bones in *Limulus.*
Anat. Anz., IX, 429-438, 4 figs.

——— 1902 A
On the structure and classification of the Trilobita.
Amer. Naturalist, XXXVI, 379-393, 3 text-figs.
Abstract in Geol. Centralbl., IX, 663.

——— 1902 B
On the origin of vertebrates. With special reference to the structure of the ostracoderms.
Verh. internat. Zool.-Kongr., V, Berlin, 1901, 180-192, 6 text-figs.
Brief abstract in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 133-134.

——— 1903 A
On the appendages of *Trilobita.*
Amer. Naturalist, XXXVII, 223-242, 9 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 159-160.

——— 1903 B
On the structure of the Pteraspidæ and Cephalaspidæ.
Amer. Naturalist, XXXVII, 827-865, pls. i, ii, 10 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 160.

Patten, William—Continued 1903 C

The structure of the ostracoderms.

Science (n.s.), XVII, 488-489.

—— 1903 D

On the structure and classification of the Trematáspidæ.

Mem. Acad. Sci. St. Petersb. (8), XIII, 1-33, pls. i, ii.

The bibliography comprises 20 titles.

For brief note see Science (n.s.), XIX, 397.

—— 1904 A

New facts concerning *Bothriolepis*.

Biol. Bull., VII, 113-124, 6 text-figs.

Abstract in Geol. Centralbl., VIII, 379.

—— 1905 A

The structure of *Bothriolepis*.

Science (n.s.), XXI, 297.

—— 1905 B

Studies relating to the origin of the vertebrates.

Publ. Carnegie Instn. Wash. Year Book No. 3, 1904 (1905), 140.

—— 1906 A

Investigations relating to the origin of vertebrates.

Publ. Carnegie Instn. Wash. Year Book No. 4, 1905 (1906), 283-284.

—— 1912 A

The evolution of the vertebrates and their kin.

Philadelphia, 8vo., i-xxi+1-486 pages, 309 figs.

Reviewed in Amer. Jour. Sci. (4), XXXIII, 590-592; Science (n.s.), XXXVI, 120-122; Nature, XCI, 79.

—— 1912 B

On the origin of vertebrates.

For a critique of this paper by W. E. Ritter, see Amer. Naturalist, XLVI, 623-632.

—— 1925 A

The origin of vertebrates.

Science (n.s.), LXI, p. x, June 19.

—— 1926 A

New ostracoderms from Spitzbergen.

Bull. Geol. Soc. Amer., XXXVII, 237 (Abstract).

Pavlow, M. W. 1888 A

Abstract in Geol. Mag. (3), V, 572.

—— 1901 A

Nouvelles trouvailles de *Mastodon borsoni* Lart. au sud de la Russie.

Annuaire Géol. Min. Russie, V, livr. 2-3, 1-18, pl. 1.

Pavlow, M. W.—Continued 1903 A

Protohippus en Russie.

Bull. Soc. Natural. Moscou, XVII, 173-182, pl. iii.

Abstracts in Jahresh. Anat. Entwickl. (N.F.), X, Abth. 3, 182; Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 316; Rev. crit. Paléozool., VIII, 153-154; Geol. Centralbl., V, 725.

—— 1903 B

Études sur l'histoire paléontologique des ongulés. VIII: Sélenodontes tertiaires de la Russie.

Bull. Soc. Natural. Moscou (n.s.), XVII, 200-221, pls. vi, vii.

A list of works consulted embraces 46 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 315-316; Geol. Centralbl., V, 723.

—— 1903 C

Mastodon angustidens Cuv. et *Mastodon longirostris* Kaup de Kertch.

Annuaire Géol. Min. Russie, VI, 128-139, pls. i, ii.

There is a bibliography of 29 titles.

The paper is printed in Russian and in French.

—— 1904 A

Procamelus du gouvernement de Kherson.

Mém Soc. Nat. nouv. Russ., XXV, pt. ii, 113-133, pl. i.

Abstracts in Geol. Zentralbl., V, 723; Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 316; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 190; X, pt. 3, 182; Geol. Zentralbl., VI, 664.

—— 1906 A

Résumé de la description des mammifères fossiles recueillis par l'expedition polaire du Baron E. Toll en 1900-1903.

Bull. Acad. Sci. St. Petersb. (5), XXIV, 199-203.

—— 1906 B

Études sur l'histoire paléontologiques des ongulés. IX: Sélenodontes posttertiaires de la Russie.

Mém. Acad. Sci. St. Pétersb. (8), XX, 1-95, pls. i-viii.

The works consulted and cited are 96 in number. Authors abstract in Ann. Géol. Min. Russie, IX, 145.

—— 1907 A

Revue de la littérature russe pour la paléontologie des mammifères. 1901-1906.

Annuaire Géol. Min. Russie, IX, 139-146.

Pavlow, M. W.—Continued 1908 A
Quelques carnivores fossiles du gouvernment de Kherson et de Bessarabie.
Mém. Soc. Nat. nouv. Russ., XXXII, 28-49, pls. i, ii.
Author's abstract in Annuaire Géol. Min. Russie, XI, 1909, 163.

—— 1909 A
Les éléphants posttertiaires de diverses localités en Russie.
Annuaire Géol. Min. Russie, XI, 167-174, pl. v.
In Russian and French.

—— 1910 A
Les éléphants fossiles de la Russie.
Nouv. Mém. Soc. Nat. Moscou, XVII (XXII), liv. 2, 1-60, pls. i-iii.
For review see Geol. Mag. (5), IX, 38-39. Abstract in Geol. Centralbl., XVI, 492; XX, 67; Nature, LXXXVII, 229.

—— 1913 A
Mammifères tertiaires de la Nouvelle Russie. Avec un article géologique du Prof. A. P. Pavlow. 1-re Partie. Artiodactyla, Perissodactyla (*Aceratherium kowalevskii* n. s.).
Nouv. Mém. Soc. Nat. Moscou, XVII (XXII), liv. 3, 1-68, pls. i-iv.

—— 1915 A
Mammifères tertiaires de la Nouvelle Russie. Avec un article géologique du Prof. A. P. Pavlow. 2-e Partie. *Aceratherium incisivum,* Hipparion, Proboscidea, Carnivora.
Nouv. Mém. Soc. Nat. Moscou, XVII (XXII), liv. 4, 1-78, pls. v-vii.

—— 1925 A
Nouvelles données scientifiques sur la position de l'*Hipparion.*
Bull. Soc. Natural. Moscou, 1824 or 1825, 313-328, 5 figs.

Peabody, Charles 1908 A
The exploration of Bushey Cavern, near Cavetown, Maryland.
Bull. Phillips Acad., IV, 5-12, map, 8 pls.

—— 1913 A
A summary of the archæology of Trenton, New Jersey, U. S. A.
Internat. Congr. Americanists, XVIII, London, 1912, pt. i, 3-4.

Peale, A. C. 1876 A
Report of A. C. Peale, Geologist of Middle Division.
Rep. U. S. Geol. Surv. Terrs. (Hayden) for 1874, 73-180, plates and maps.

Peale, A. C.—Continued 1912 A
On the stratigraphic position and age of the Judith River formation.
Jour. Geol., XX, 530-549, 640-652, 738-757. Abstract in Geol. Centralbl., XIX, 264-266.

—— 1913 A
The laws of nomenclature in paleontology.
Science (n.s.), XXXVII, 979-980.

Peale, R. 1831 A
Narrative of the discovery and exhumation of the skeleton of the mastodon.
In Goddard's "American Natural History," II, 211-224.

Pearson, Helga S. 1921 A
The skull and some related structures of a late embryo of *Lygosoma.*
Jour. Anat. Lond., LVI, 20-44, 7 figs.

—— 1923 A
Some skulls of *Perchœrus* (*Thinohyus*) from the White River and John Day formations.
Bull. Amer. Mus. Nat. Hist., XLVIII, 61-96, 17 figs.
Abstract in Geol. Zentralbl., XXX, 252.

—— 1924 A
The skull of the dicynodont reptile, *Kannemeyeria.*
Proc. Zool. Soc. Lond., 1924, 793-826, figs. 1-18.
There is a bibliography of 16 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 84.

—— 1924 B
A dicynodont reptile reconstructed.
Proc. Zool. Soc. Lond., 1924, 827-855, figs. 19-39.
The bibliography presents 29 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 84.

—— 1924 C
Solenodosaurus Broili, a seymouriamorph reptile.
Ann. Mag. Nat. Hist. (9), XIV, 338-343, 1 fig.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, 84.

Peck, F. B. 1904 A
The Atlantosaur and Titanotherium beds of Wyoming.
Proc. Wyom. Penn. Geol. Soc., VIII, 25-41. Abstract in Geol. Centralbl., VII, 119.

Peet, Charles Emerson 1904 A
Glacial and post-glacial history of the Hudson and Champlain Valleys.
Jour. Geol., XII, 415-469, 617-660, 24 figs.

Pehrson, Torsten 1922 A

Points in the cranial development of teleostomian fishes.

Acta Zool., III, 1-63, 24 figs.

The bibliography comprises 59 titles.

Pellegrin, Jaques 1912 A

Sur la dentition des diables de mer.

Bull. Soc. Philom., Paris (10), IV, 91-98, 3 figs.

—— 1912 B

Sur la dentition des diables de mer et particulièrement de *Mobula olfersi* Müller.

C. R. Acad. Sci. Paris, CLIV, 721-723.

Perkins, George H. 1908 A

Fossil Cetacea of the Pleistocene of the United States and Canada, with special reference to *Delphinapterus vermontanus.*

Rep. Geol. Surv. Vermont, 1907-1908, VI, 76-112, pls. x-xx.

—— 1910 A

On a skeleton of a whale in the Provincial Museum, Halifax, Nova Scotia; with notes on the fossil Cetacea of North America.

Proc. Nova Scot. Inst., XII, 139-164, pls. i-viii.

Abstracts in Nature, LXXXIV, 371; Sci. Progress, V, 673.

—— 1910 B

History and condition of the State Cabinet [of Vermont].

Rep. Geol. Surv. Vermont, 1909-1910, VII, 1-75, pls. i-xviii.

Perkins, H. C. 1842 B

Fossil bones from Oregon.

Proc. Bost. Soc. Nat. Hist., I, 56-57, 62.

—— 1871 A

The megatherium and its allies.

Amer. Naturalist, IV, 763-765.

Perna, Giovanni 1906 A

Die Nasenbeine. Eine embryologische und vergleichend-anatomische Untersuchung.

Arch. Anat. Entwickl., 1906, 119-154, pls. iv-x.

The bibliography comprises 69 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 68-69.

Perret, Auguste 1900 A

Les dipneustes.

Rev. Scient. Paris (4), XIII, 786-788.

Perrier, Edmond 1898 A

L'origine des vertébrés.

C. R. Acad. Sci. Paris, CXXVI, 1479-1486.

Perrier, Edmond—Continued 1920 A

La terre avant l'histoire. Les origines de la vie et de l'homme.

Paris, 8vo., 1-415, 4 pls.

The bibliography presents 94 titles.

Perrin, A. 1896 A

Sur la carpe des anoures.

C. R. Acad. Sci. Paris, CXXII, 90-91.

—— 1899 A

La ceinture scapulaire ancestrale des urodèles.

Trav. Stat. zool. Wimereux, VII, 521-527, 3 figs.

Perrin, J. B. 1870 A

Notes on the anatomy of *Balænoptera rostrata.*

Proc. Zool. Soc. Lond., 1870, 805-817.

Peter, Karl 1898 A

Entwicklung und funktionelle Gestaltung des Schädels von *Ichthyophis glutinosus.*

Morphol. Jahrb., XXV, 555-628, pls. xix-xxi, 1 text-fig.

The bibliography presents 30 titles.

—— 1902 A

Zur Bildung des primitiven Gaumens bei Mensch und Säugetieren.

Anat. Anz., XX, 545-552, 4 text-figs.

—— 1924 B

Die Entwicklung des Säugetiergaumens.

Zeitschr. gesamte Anat. Ergeb., XXV, 448-564, 26 figs.

The bibliography (pages 449-452) presents 113 titles.

Peters, Wilhelm 1838 A

Observations ad anatomiam cheloniorum. i, Descriptio osteologica *Hydromedusæ maximilianæ.* ii, De significatione ossium cheloniorum formantium.

Dissertatio inauguralis, Berlin, 1-22, 1 pl.

—— 1864 B

Ueber die Säugethiergattung *Solenodon.*

Abh. Akad. Wiss. Berlin, 1863 (1864), 1-22, pls. i-iii.

—— 1867 A

Die Verbindung des Os tympanicum mit dem Unterkiefer.

Monatsber. Akad. Wiss. Berlin, 1867, 725-729.

See also Ann. Mag. Nat. Hist. (4), I, 390-391, 1868.

Peters, Wilhelm—Continued 1867 B
Das Os tympanicum und die Gehörknöchelchen der Schnabelthiere in Bezug auf die Frage von der Deutung des Quadratbeins bei den Vögeln.
Monatsber. Akad. Wiss. Berlin, 1867, 779-782, 1 plate.

—— 1867 C
On the relation of the tympanic bone to the mandible in the marsupials.
Proc. Zool. Soc. Lond., 1867, 953.

—— 1868 A
Ueber die Gehörknöchelehen und den Meckel'schen Knorpel bei den Crocodilen.
Monatsber. Akad. Wiss. Berlin, 1868, 592-598, pl. i.

—— 1868 B
On the union of the tympanic bone with the lower jaw occurring in the marsupials during development, as a fresh proof of the agreement of this bone with the os quadratum of the other classes of Vertebrata.
Ann. Mag. Nat. Hist. (4), I, 388-390.

—— 1869 A
Ueber die Gehörknöchelchen der Schildkröten, Eidechsen und Schlangen.
Monatsber. Akad. Wiss. Berlin, 1869, 6-8.

—— 1872 A
Note on the systematic name of the walrus.
Ann. Mag. Nat. Hist. (4), X, 151.

—— 1874 A
Ueber die Gehörknöchelchen und ihr Verhältniss zu dem ersten Zungenbeinbogen bei *Sphenodon punctatus*.
Monatsber. Akad. Wiss. Berlin, 1874, 40-45, 3 figs.

Petersen, Gerhard 1921 A
Untersuchungen über das Fussskelett des Rindes.
Morphol. Jahrb., LI, 291-333, pls. v-vii, text-figs. 1-53.
The bibliography presents 21 titles.

Petersen, Hans 1922 A
Zur Konstructionsanalyse des Kieferapparates der Froschlarven.
Anat. Anz. Ergänzungsh., LV, 22-28, with figs.

Peterson, Olof A. 1895 A
Geology of the Uinta Basin.
Bull. Amer. Mus. Nat. Hist., VII, 72-74.

Peterson, Olof A.—Continued 1904 A
Osteology of *Oxydactylus*, a new genus of camels from the Loup Fork of Nebraska, with descriptions of two new species.
Ann. Carnegie Mus., II, 434-476, pls. iv-xv, 3 text-figs.
Abstracts in Geol. Centralbl., VI, 52-53; Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 144.

—— 1904 B
Recent observations upon *Dæmonelix*.
Science (n.s.), XX, 344-345.
Abstract in Geol. Centralbl., VII, 424.

—— 1905 A
Description of new rodents and discussion of the origin of *Dæmonelix*.
Mem. Carnegie Mus., II, 139-191, pls. xvii-xxi, 11 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 460-462; Geol. Centralbl., VIII, 372; Rev. crit. Paléozool., X, 198-199.

—— 1905 B
Suggestions regarding the probable origin of *Dæmonelix*.
Science (n.s.), XXI, 296.

—— 1905 C
Preliminary note on a gigantic mammal from the Loup Fork beds of Nebraska.
Science (n.s.), XXII, 211-212.
Abstract in Geol. Centralbl., VIII, 374.

—— 1905 D
A correction of the generic name (*Dinochœrus*) given to certain fossil remains from the Loup Fork Miocene of Nebraska.
Science (n.s.), XXII, 719.
Abstract in Geol. Centralbl., VIII, 374.

—— 1906 A
New suilline remains from the Miocene of Nebraska.
Mem. Carnegie Mus., II, 305-320, pls. xxxiv, xxxv, 4 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 302-303; Geol. Centralbl., XI, 106; Rev. crit. Paléozool., X, 201; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 167; Sci. Progress, II, 510.

—— 1906 B
The Agate Spring fossil quarry.
Ann. Carnegie Mus., III, 487-494, pl. xxi, 5 text-figs.
Abstracts in Geol. Centralbl., XI, 102; Rev. crit. Paléozool., XI, 9.

Peterson, Olof A.—Continued 1906 C

The Miocene beds of western Nebraska and eastern Wyoming and their vertebrate faunæ.

Ann. Carnegie Mus., IV, 21-72, pls. ix-xix, 20 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, II, 486-491; Geol. Centralbl., XI, 381-382; Rev. crit. Paléozool., XI, 218; Sci. Progress, II, 502.

—— 1906 D

Preliminary description of two new species of the genus *Diceratherium* Marsh, from the Agate Spring fossil quarry.

Science (n.s.), XXIV, 281-283.

Brief abstract in Geol. Centralbl., XI, 106.

—— 1907 A

Preliminary notes on some American chalicotheres.

Amer. Naturalist, XLI, 733-752, 26 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 530-531; Rev. crit. Paléozool., XII, 229; Amer. Jour. Sci. (4), XXVII, 94.

—— 1908 A

Description of the type specimen of *Stenomylus gracilis* Peterson.

Ann. Carnegie Mus., IV, 286-300, 12 text-figs.

Abstracts in Geol. Centralbl., XII, 597; Rev. crit. Paléozool., 13, 1.

—— 1909 A

A revision of the Entelodontidæ.

Mem. Carnegie Mus., IV, 41-156, pls. liv-lxii, 80 text-figs.

Reviewed in Amer. Jour. Sci. (4), XXVIII, 411; Science (n.s.), XXXI, 147-148; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 532; Geol. Centralbl., XV, 218; Rev. crit. Paléozool., XIV, 2; Sci. Progress, IV, 660-661, fig. 3.

—— 1909 B

A new genus of carnivores from the Miocene of western Nebraska.

Science (n.s.), XXIX, 620-621.

Abstract in Rev. crit. Paléozool., XIV, 7.

—— 1910 A

Description of new carnivores from the Miocene of western Nebraska.

Mem. Carnegie Mus., IV, 205-278, pls. lxxiv-lxxxv, 69 text-figs.

Abstracts in Geol. Centralbl., XVI, 58; Nature, LXXXV, 288; Sci. Progress, V, 666-667; Rev. crit. Palézool., XV, 19.

—— 1911 A

A new camel from the Miocene of western Nebraska.

Ann. Carnegie Mus., VII, 260-266, pls. xxxvii-xl.

Abstract in Geol. Centralbl., XVII, 38.

Peterson, Olof A.—Continued 1911 B

A mounted skeleton of *Stenomylus hitchcocki*, the Stenomylus quarry, and remarks upon the affinities of the genus.

Ann. Carnegie Mus., VII, 267-273, pls. xli-xliv.

Abstracts in Geol. Centralbl., XVII, 38; Sci. Progress, VI, 561.

—— 1911 C

A mounted skeleton of *Diceratherium cooki* Peterson.

Ann. Carnegie Mus., VII, 274-279, pl. xlv.

Abstracts in Geol. Centralbl., XVII, 38; Sci. Progress, VI, 562.

—— 1912 A

Recently proposed species of the genus *Diceratherium*.

Science (n.s.), XXXVI, 801.

—— 1912 B

Symposium on ten years progress in vertebrate paleontology. *Artiodactyla*.

Bull. Geol. Soc. Amer., XXIII, 162-178.

For the other articles of this symposium see the 1912 papers of Gidley, Matthew, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston, and Sinclair.

Peterson's paper is followed by an extensive bibliography of the subject.

—— 1912 C

A group of stenomylins recently prepared and exhibited in the Carnegie Museum.

Ann. Carnegie Mus., VIII, 366-369, pls. xxi, xxii, 1 text-fig.

—— 1913 A

A new species of *Moropus* (*M. hollandi*) from the base of the Middle Miocene of western Nebraska.

Science (n.s.), XXXVIII, 673.

—— 1914 A

A new titanothere from the Uinta Eocene.

Ann. Carnegie Mus., IX, 29-52, pls. vi-x, 15 text-figs.

Abstract in Geol. Centralbl., XXIX, 186.

—— 1914 B

A small titanothere from the Lower Uinta beds.

Ann. Carnegie Mus., IX, 53-57, pl. xi, 2 text-figs.

—— 1914 C

A mounted skeleton of *Platigonus leptorhinus* in the Carnegie Museum.

Ann. Carnegie Mus., IX, 114-117, pl. xxix.

Abstract in Geol. Zentralbl., XXIX, 157.

Peterson, Olof A.—Continued 1914 D
Some undescribed remains of the Uinta titanothere *Dolichorhinus.*
Ann. Carnegie Mus., IX, 129-138, 7 text-figs.
Abstract in Geol. Zentralbl., XXIX, 187.

—— 1914 E
The osteology of *Promerycochœrus.*
Ann. Carnegie Mus., IX, 149-219, pls. xxxiii-xlii, 41 text-figs.
Abstract in Geol. Zentralbl., XXIX, 156.

—— 1914 F
Correction of a generic name.
Ann. Carnegie Mus., IX, 220.
Substitutes *Eotitanotherium* for *Diploceras.*

—— 1917 A
A fossil-bearing alluvial deposit in Saltville Valley, Virginia.
Ann. Carnegie Mus., XI, 469-474, pl. xlviii, 7 text-figs.
Abstract in Geol. Zentralbl., XXIX, 123.

—— 1918 A
New artiodactyls from the upper Eocene of the Uinta basin, Utah.
Bull. Geol. Soc. Amer., XXIX, 153 (Abstract).

—— 1919 A
Report upon the material discovered in the Upper Eocene of the Uinta basin by Earl Douglass in the years 1908-1909, and by O. A. Peterson in 1912.
Ann. Carnegie Mus., XII, 40-168, pls. xxxiv-xlvii, 19 text-figs.

—— 1920 A
The American diceratheres.
Mem. Carnegie Mus., VII, 399-456, pls. lvii-lxvi, 37 text-figs.
Reviewed in Amer. Jour. Sci. (4), L, 396.
Abstracts in Rev. crit. Paléozool., XXVII, 215; Neues Jahrb. Min. Geol. Pal., 1923, I, 314-316.

—— 1923 A
A fossil-bearing slab of sandstone from the Agate Spring quarries of western Nebraska, exhibited in the Carnegie Museum.
Ann. Carnegie Mus., XV, 91-93, pl. v, 1 text-fig.

—— 1923 B
The hyoid arch of the Miocene camel *Stenomylus.*
Ann. Carnegie Mus., XV, 94-95, pl. vi.
Abstract in Geol. Zentralbl., XXXI, 414.

Peterson, Olof A.—Continued 1923 C
Restoration of *Merychyus elegans* subsp. *minimus* Peterson.
Ann. Carnegie Mus., XV, 96-103, pls. vii, viii, 8 text-figs.
Abstract in Geol. Zentralbl., XXXI, 414.

—— 1924 A
Osteology of *Dolichorhinus longiceps* Douglass, with a review of the species of *Dolichorhinus* in the order of their publication.
Mem. Carnegie Mus., IX, 405-472, pls. xliv-lvii, 18 text-figs.
Bibliography on pages 444-445.

—— 1924 B
Discovery of fossil mammals in the Brown's Park formation of Moffatt County, Colorado.
Ann. Carnegie Mus., XV, 299-304, 3 figs.

—— 1926 A
The fossils of the Frankstown Cave, Blair County, Pennsylvania.
Ann. Carnegie Mus., XVI, 249-315, pls. xvii-xxv, 10 text-figs.

—— 1927 A
The inferior dentition of a young mastodon.
Ann. Carnegie Mus., XVII, 255-257, 2 figs.

—— 1928 A
The Brown's Park formation.
Mem. Carnegie Mus., XI, 87-120, pls. ix-xv, 24 text-figs.

——, and C. W. **Gilmore** 1902 A
Elosaurus parvus; a new genus and species of Sauropoda.
Ann. Carnegie Museum, I, 490-499, pl. xxv, 10 text-figs.

Peterson, William 1924 A
Dinosaur tracks on the roof of coal mines.
Nat. Hist., XXIV, 388-391, 4 figs.

Petronievics, Branislav 1917 A
On the skull of *Tritylodon longævus.*
Ann. Mag. Nat. Hist. (8), XX, 283-289, pl. x, 3 text-figs.
Abstract in Geol. Mag. (6), V, 40.

—— 1918 A
Note on the lower jaw of *Stereognathus ooliticus* Charlesworth.
Ann. Mag. Nat. Hist. (9), I, 67-70, pl. iii.

—— 1918 B
Note on the pectoral fin of *Eusthenopteron.*
Ann. Mag. Nat. Hist. (9), II, 471-476, 2 figs.
The bibliography presents titles of 12 papers.

Petronievics, Branislav—Cont'd 1919 A

Sur la loi de l'évolution irréversible.

Sci. Progress, XIII, 406-419.

There is a bibliography of 29 titles.

—— 1919 B

Comparison between the lower jaws of the cynodont reptiles *Gomphognathus* and *Cynognathus*.

Proc. Zool. Soc. Lond., 1918 (1919), 197-207, 8 figs.

There is a bibliography of 11 titles.

—— 1921 A

L'évolution universelle. Exposé des preuves et des lois de l'évolution mondiale et des évolutions particulières (inorganique, organique, intellectuelle et sociale).

Paris, 1921, i-ii+1-213 pages.

There are numerous citations of the literature of the subject discussed.

—— 1922 A

Note on root-division in the molar teeth of *Tritylodon*.

Ann. Mag. Nat. Hist. (9), X, 216-217.

—— 1923 A

Über das Ulnare im Carpus der Berliner *Archæornis*.

Centralbl. Min. Geol. Pal., 1923, 94-95.

Abstracts in Geol. Zentralbl., XXIX, 351; XXX, 349.

—— 1923 B

Remarks on the skulls of *Mœritherium* and *Palæomastodon*.

Ann. Mag. Nat. Hist. (9), XII, 55-61, pl. ii, 2 figs.

——, and A. S. **Woodward** 1916 A

New parts of the pectoral and pelvic arches of *Archæopteryx* (Abstract).

Nature, XVIII, 283.

—— —— 1917 A

On the pectoral and pelvic arches of the British Museum specimen of *Archæopteryx*.

Proc. Zool. Soc. Lond., 1917, 1-6, pl. i.

Abstract in Sci. Progress, XII, 425.

Pettigrew, James Bell 1872 A

On the physiology of wings: being an analysis of the movements by which flight is produced in the insect, bat, and bird.

Proc. Roy. Soc. Edinb., VII, 336-350.

Pevsner, Vera 1926 A

Zu Frage über die Structur und die Entwicklung der Schuppen einiger Knochenfische.

Zool. Anz., LXVIII, 303-313, 6 figs.

There is a bibliography of 12 titles.

Peyer, Bernhard 1912 A

Die Entwicklung des Schädelskeletes von *Vipera aspis*.

Morphol. Jahrb. XLIV, 563-621, 22 text-figs., pls. xiv-xvi.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 96-98.

—— 1919 A

Die Flossenstacheln der Welse.

Anat. Anz., LII, 63-64.

—— 1920 A

Zum "Problem der Entstehung der Zahnform."

Anat. Anz., LIII, 107-111.

—— 1922 A

Die Flossenstacheln der Welse und Panzerwelse, sowie des Karpfens.

Morphol. Jahrb., LI, 492-554, 68 text-figs.

There are 38 titles in the bibliography.

See **Stromer** and **Peyer**.

Pfeiffer, Hermann 1854 A

Zur vergleichenden Anatomie des Schultergerüstes und der Schultermuskeln bei Säugethieren, Vögeln und Amphibien.

Inaugural-Abhandlung, Giessen., 4to., 1-52, 1 pl.

Pfizenmayer, E. 1906 A

Beitrag zur Morphologie von *Elephas primigenius*, Blumemb. und Erklärung meines Reconstructionsversuch.

Verh. Min. Ges. St. Pétersb., XLIII, 521-542, pl. vii.

Translation in Rep. Smithson. Instn. for 1906 (1907), 321-333, pl. 1, text-figs. 1-4.

—— 1910 A

Ein Beitrag zur Frage, wie das Mammut ausgesehen hat.

Aus der Natur, VI, 148-159, 7 figs.

Philippi, E. 1903 A

Säugethiere der Trias.

Frech's "Lethaea geognostica. Pt. II. Das Mesozoicum." Vol. I, Trias., 9-13, with text-figs.

——, and F. **Frech** 1903 A

Die Fische der Trias.

Frech's "Lethaea geognostica. Pt. II. Das Mesozoicum." Vol. I, Trias., 9-13, pls. i-vi.

——, E. **Frech**, and W. **Volz** 1903 A

Reptilien der Trias.

Frech's "Lethaea geognostica. Pt. II. Das Mesozoicum." Vol. I, Trias., 14-19, pls. xii-xviii, text-figs.

Philippi, R. A. 1893 A
Vorläufige Nachricht über fossile Säugethierknochen von Ulloma, Bolivia.
Zeitschr. deutsch. Geol. Ges., XLV, 87-96, 9 figs.

Phillips, William B. 1912 A
A reconnaissance report on the geology of the oil and gas fields of Wichita and Clay Counties, Texas.
Bull. Univ. Texas, No. CCXLVI (Sci. ser. No. XXIII), 1-308, pls. i-xxvi, 8 text-figs.

Phinney, A. J. 1882 A
Geology of Delaware County [Indiana].
Geol. Surv. Ind., XI, 126-149.

—— 1883 A
Geology of Randolph County [Indiana].
Geol. Surv. Ind., XII, 177-195.

—— 1884 A
Geology of Grant County [Indiana].
Geol. Surv. Ind., XIII, 1883, 138-153.

Phisalix, Marie 1912 A
Modifications que la fonction venimeuse imprime à la tête osseuse et aux dents chez les serpents.
Ann. Sci. nat. (9), XVI, 161-205, 38 text-figs.

—— 1914 A
Anatomie comparé de la tête et de l'appareil venimeux chez les serpents.
Ann. Sci. nat. (9), XIX, 1-114, pls. i-v, 51 text-figs.

Pia, J. 1916 A
Th. Arldt: Die Stammesgeschichte der Primaten und die Entwicklung der Menschenrassen (Fortschritte d. Rassenkunde. Heft 1, 1915, pp. 1-52). A review.
Neues Jahrb. Min. Geol. Pal., 1916, I, Ref., 128-135.

Piaz, G. Dal. See Dal **Piaz,** G.

Piers, Harry 1912 A
Mastodon remains in Nova Scotia.
Trans. Nova Scot. Inst. Sci., XIII, 163-174.

Pilgrim, G. E. 1911 A
The fossil Giraffidæ of India.
Mem. Geol. Surv. India (n.s.), IV, No. 1, 1-29, pls. i-iv.

—— 1912 A
The vertebrate fauna of the Gaj series in the Bugti Hills and the Punjab.
Mem. Geol. Surv. India (n.s.), IV, No. 2, 1-83, pls. i-xxxi.

Pilgrim, G. E.—Continued 1913 A
The correlation of the Siwaliks with the mammal horizons of Europe.
Rec. Geol. Surv. India, XLIII, 264-326, pls. xxvi-xxviii.

—— 1914 A
Further description of *Indarctos salmontanus* Pilgrim, the new genus of bear from the Middle Siwaliks, with some remarks on the fossil Indian Ursidæ.
Rec. Geol. Surv. India, XLIV, 225-233, pl. xx.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Geol. Zentralbl., XXVI, 252.

—— 1915 A
New Siwalik Primates and their bearing on the questions of evolution of man and the Anthropoidea.
Rec. Geol. Surv. India, XLV, 1-74, pls. i-iv, 2 text-figs.
Reviewed in Science (n.s.), XLIII, 341-342; Rev. crit. Paléozool., XXI, 9; L'Anthrop. Paris, XXVI, 1915, 396-410; Nature, XCV, 277.

—— 1915 B
Note on the new feline genera *Sivælurus* and *Paramachærodus* and on the possible survival of the subphyllum in modern times.
Rec. Geol. Surv. India, XLV, 138-155, pls. v-vi.
Abstract in Rev. crit. Paléozool., XXI, 8.

Pinkus, Felix 1904 A
Über Hautsinnesorgane neben dem menschlichen Haar (Haarscheiben) und ihre vergleichend-anatomische Bedeutung.
Arch. mikr. Anat. Bonn, LXV, 121-179, pls. viii-xl.
The bibliography composes 48 titles.

Plate, L. 1926 A
Beiträge zu einer Theorie des knöchernen Schädels der Wirbeltiere.
Palaeont. Zeitschr., VIII, 44.

Pleas, Elwood 1891 A
Six species of post-pliocene shells found associated with bones of *Mastodon americanus* at Losantville, Randolph Co., Ind.
Nautilus, IV, 131.

Plieninger, F. 1901 A
Beiträge zur Kenntniss der Flugsaurier.
Palaeontogr., XLVIII, 65-90, pls. iv, v, 6 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 144-145; Geol. Centralbl., III, 442.

Plieninger, F.—Continued 1906 A

Ueber die Hand der Pterosaurier.

Centralbl. Min. Geol. Pal., 1906, 399-412, 7 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 124.

—— 1906 B

Die fliegenden Reptilien der Jurazeit.

Jahresh. Ver. Naturk. Württemb., LXII, ciii.

—— 1907 A

Die Pterosaurier der Juraformation Schwabens.

Palaeontogr., LIII, 209-314, pls. xiv-xix, 40 text-figs.

Plieninger, Theodor. 1847 A

Ueber ein neues Sauriergenus und die Einreihung der Saurier mit flachen, schneidenden Zähne in eine Familie.

Jahresh. Ver. Naturk. Württemb., II, 148-154, pl. iii.

Poche, Franz 1908 A

Über die Anatomie und die systematische Stellung von *Bradypus torquatus*.

Zool. Anz., XXXIII, 567-580, 7 text-figs.

—— 1911 A

Über die Abtrennung der Selachier von den Fischen als eine eigene Klasse.

Arch. Naturges., LXXVII, Bd. i, 49-51.

—— 1911 B

Neue Untersuchungen über die Anatomie und die systematische Stellung von *Scæopus torquatus*, nebst Bemerkungen über die morphologische Bedeutung des basalen Gliedes des Radius I des Säugetierchiridiums.

Arch. Naturges., LXXVII, pt. 1, 33-49, pl. iv.

Pocock, Reginald Innes 1902 A

A new arrangement of the existing species of Equidæ, with the description of a new subspecies of "zebra."

Ann. Mag. Nat. Hist. (7), x, 304-308.

—— 1905 A

On the preorbital pit in the skulls of domestic horses and quaggas.

Ann. Mag. Nat. Hist. (7), xv, 516-518.

—— 1906 A

Exhibition of the skull of a horse showing preorbital pits.

Proc. Zool. Soc. Lond., 1906, 377.

—— 1908 A

On the generic names of the rupicaprine ruminants known as serows and gorals.

Ann. Mag. Nat. Hist. (8), I, 183-188.

Pocock, R. I.—Continued 1908 B

Notes upon some species and geographical races of serows (*Capricornis*) and gorals (*Næmorhedus*) based upon specimens exhibited in the Society's gardens.

Proc. Zool. Soc. Lond., 1908, 173-202, text-figs. 30-38.

—— 1910 A

Scent glands and the classification of deer.

Field, CXVI, 97.

—— 1910 B

Antlers and the classification of deer.

Field, CXVI, 199.

—— 1912 A

On antler-growth in the Cervidæ, with special reference to *Elaphurus* and *Odocoileus* (*Dorcelaphus*).

Proc. Zool. Soc. Lond., 1912, 773-783, text-figs. 108-112.

—— 1913 A

The affinities of the antartic wolf (*Canis antarcticus*).

Proc. Zool. Soc. Lond., 1913, 382-393, figs. 70, 74.

—— 1914 A

On the feet of domestic dogs.

Proc. Zool. Soc. Lond., 1914, pt. 2, 478-484.

—— 1914 B

On the feet and other external features of the Canidæ and Ursidæ.

Proc. Zool. Soc. Lond., 1914, pt. 3, 913-941, text-figs. 1-13.

—— 1916 A

The tympanic bulla in hyænas.

Proc. Zool. Soc. Lond., 1916, 303-307, 7 figs.

—— 1916 B

The alisphenoid canal in civets and hyænas.

Proc. Zool. Soc. Lond., 1916, 442-445, 8 figs.

—— 1916 C

On the hyoidean apparatus of the lion (*F. leo*) and related species of Felidæ.

Ann. Mag. Nat. Hist. (8), XVIII, 222-229, 2 figs.

—— 1916 D

On the tooth change, cranial characters, and classification of the snow-leopard, or ounce (*Felis uncia*).

Ann. Mag. Nat. Hist. (8), XVIII, 306-316, 4 figs.

Pocock, R. I.—Continued 1916 E
The structure of the auditory bulla in existing species of Felidæ.
Ann. Mag. Nat. Hist. (8), XVIII, 326-334, 7 figs.

—— 1916 F
On the course of the internal carotid artery and the foramina connected therewith in the skulls of the Felidæ and Viverridæ.
Ann. Mag. Nat. Hist. (8), XVI, 261-269, pls. x, xi.

—— 1916 G
Discussion on the "Biologia Centrali-Americana."
Proc. Zool. Soc. Lond., 1916, 547-548.

—— 1917 A
The classification of the existing Felidæ.
Ann. Mag. Nat. Hist. (8), XX, 329-330.
The bibliography comprises 17 titles.

—— 1918 A
On the external characters of the lemurs and *Tarsius*.
Proc. Zool. Soc. Lond., 1918, 19-53, 16 text-figs.

—— 1918 B
The baculum, or os penis of some genera of Mustelidæ.
Ann. Mag. Nat. Hist. (9), I, 307-312, 12 figs.

—— 1920 A
Discussion on the zoological position and affinities of *Tarsius*.
Proc. Zool. Soc. Lond., 1919 (1920), 494-495.

—— 1920 B
On the external and cranial characters of the European badger (*Meles*) and of the American badger (*Taxidea*).
Proc. Zool. Soc. Lond., 1920, 423-436, 25 figs.

—— 1921 A
On the external characters and classification of the Mustelidæ.
Proc. Zool. Soc. Lond., 1921, 803-837, 39 figs.

—— 1921 B
The external characters and classification of the Procyonidæ.
Proc. Zool. Soc. Lond., 1921, 369-422, 13 text-figs.

—— 1923 A
The classification of the Sciuridæ.
Proc. Zool. Soc. Lond., 1923, 209-246, figs. 18-29.

Pohl, Lothar 1909 A
Ueber das Os penis der Musteliden.
Jena. Zeitschr. Naturwiss., XLV, 381-394, 13 text-figs.

—— 1911 A
Das Os penis der Carnivoren einschliesslich der Pinnipedier.
Jena. Zeitschr. Naturwiss., XLVII, 115-160, pls. vii, viii, 4 text-figs.

Pohle, Hermann 1920 A
Zur Kenntniss der Raubtiere. Die Stellung der Gattungen *Amphictis* und *Nandinia*.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1920, 48-62, 8 figs.
There is a bibliography of 25 titles.

—— 1921 A
Ueber den physiologischen Zahnausfall.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1921, 115-122, with figs.

—— 1923 A
Über den Zahnwechsel der Bären.
Zool. Anz., LV, 266-277, 7 figs.

Pohle, Richard 1904 A
Das Mammut in der Vergangenheit Sibiriens.
Naturw. Wochenschr., XIX, No. 37, 577-583.
See also Verein für Erdkunde, Dresden, Feb. 28, 1902.

Pohlig, H. 1912 A
Sur une vieille mandibule de "*Tetracaulodon ohioticum*" Blum., avec défense *in situ*.
Bull. Soc. belge Géol., XXVI, Proc. verb., 187-193, 2 text-figs.

Pomel, A. 1851 A
Nouvelles observations sur la structure des pieds dans les animaux de la famille des *Anoplotherium*, et dans le genre *Hyæomoschus*.
C. R. Acad. Sci. Paris, XXXIII, 16-17.

—— 1894 A
Découverte de champosauriens dans les gisements de phosphorite du suessonien de l'Algérie.
C. R. Acad. Sci. Paris, CXVIII, 1309-1310.

Pompeckj, J. F. 1905 A
Mastodon-reste aus dem interandinen Hochland von Bolivia.
Palaeontogr., LII, 17-56, pls. iii, iv.
For notice of this paper see Neues Jahrb. Min. Geol. Pal., 1907, I, 128-130.

Pompeckj, J. F.—Continued 1910 A

Organization, Lebensweise, Verbreitung und systematische Stellung der *Mosasauria*.

Jahresber. Niedersachs. geol. Ver., III, 127-140.

——. 1912 A

Amphibia. Paläontologie.

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena.), I, 338-347, 6 figs.

—— 1913 A

Fische. Paläontologie.

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena.), III, 1107-1147, 53 figs.

—— 1914 A

Ueber die ursprünglichen Wohnsitze der Fische.

Jahresh. Ver. Naturk. Württemb., LXX, page xcii.

—— 1920 A

Das angebliche Vorkommen und Wandern des Parietalforamens bei Dinosauriern.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1920, 109-129, 9 figs.

The bibliography comprises 20 titles.

Abstract in Geol. Zentralbl., XXVI, 506.

—— 1921 A

Besass der Dinosaurier *Triceratops* ein Parietalforamen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1921, 1-13, 1 fig.

—— 1922 A

Das Ohrskelett von Zeuglodon.

Senckenbergiana, IV, 43-100, pl. ii.

Abstract in Rev. crit. Pa'éozool., XXVII, 211.

—— 1922 B

Bemerkungen über Formen und Gebrauch der Gebisse ornithopoder Dinosaurier.

Palaeont. Zeitschr., IV, 87-90.

—— 1925 A

Umwelt, Anpassung und Beharrung im Lichte erdgeschichtlicher Überlieferung.

Rede zum Antritt des Rektorats der Friedrich-Wilhelms Universität zu Berlin um 15 Oktober, 1925. Pages 1-24.

—— 1926 A

Über die Phylogenie der Störe.

Palaeont. Zeitschr., VIII, 71.

—— 1926 B

Zur Kenntnis der Mesosauria (Discussion).

Palaeont. Zeitschr., VIII, 62.

Pontier, G. 1904 A

Contribution a l'étude de la dentition chez l'*Elephas primigenius*.

Le Naturaliste, XXVI, 248-249.

—— 1910 A

Note sur l'*Elephas primigenius* de la vallée de l'Aa. Reconstitution de son squelette.

C. R. Assoc. franc. Avanc. Sci., 1909, XXXVIII, Lille, 497-505.

Presents descriptions and measurements of the skull and of many of the bones of the skeleton.

—— 1910 B

Observations sur la dentition du *Mastodon andium*.

Ann. Soc. géol. Nord, XXXIX, 303-307, 1 fig.

Abstract in Geol. Centralbl., XVI, 411.

—— 1911 A

Remarques sur les variations dentaires chez les éléphants quaternaires européens.

Bull. Soc. géol. France (4), XI, 463-471, pl. x.

Abstract in Geol. Centralbl., XIX, 702.

Popowa, N. 1913 A

Zur Morphologie des Extremitäten-Skeletts der Artiodactyla *Sus* und *Bos*.

Anat. Anz., XLIII, 279-283, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 155.

Popta, Canna M. L. 1904 A

Les arcs branchiaux de quelques Murænidæ.

Ann. Sci. nat. (8), XIX, 367-390, 20 figs.

Porsild, Morten P. 1922 A

Scattered observations on narwhals.

Jour. Mamm., III, 8-13, pl. 1.

Porta, Antonio 1905 A

Ricerche anatomiche sull' apparecchio velenifero di alcuni pesci.

Anat. Anz., XXVI, 232-247, pls. v, vi.

There is appended a bibliography of 29 papers.

Posthumus, O. 1923 A

Otoliths of Teleostei from the Oligocene and the Miocene of Peel-district and of Winterswijk.

Proc. Akad. Wet. Amsterdam, XXVI, 231-234.

Pouchet, G. 1875 A

Du dévelopment du squelette des poissons osseux.

Jour. Anat. Physiol. Paris, XI, 288-308.

Pouchet, G.—Continued 1878 A
Du dévelopment du squelette des poissons osseux.
Jour. Anat. Physiol. Paris, XVI, 34-100, 140-153, pls. iv-xiii.

——, and L. **Chabry** 1884 A
Contribution à l'odontologie des mammifères.
Jour. Anat. Physiol. Paris, XX, 149-192, pls. v, vi.

Powers, Sidney 1916 A
The Acadian Triassic.
Jour. Geol., XXIV, 1-26; 105-122, 254-268, figs. 1-33.

Pownall, J. 1803 A
On the mammoth.
Tilloch's Philos. Mag., XIV, 332-337.

Powrie, James 1861 A
Cephalaspides of Forfarshire.
Geologist, IV, 137-140, 189-190.

—— 1862 A
On the Old Red sandstone of Fifeshire.
Quart. Jour. Geol. Soc., XVIII, 427-437.

—— 1863 A
Note on *Pteraspis.*
Geologist, VI, 67-69, 1 text-fig.

—— 1870 A
On the earliest known vestiges of vertebrate life, being a description of the fish remains of the Old Red sandstone rocks of Forfarshire.
Trans. Edinb. Geol. Soc., I, 284-301, pls. x-xiv.

Prashad, Baini 1918 A
Skull of *Rana tigrina* Daud.
Proc. Zool. Soc. Lond., 1919, 1-8, 8 figs.

Pratt, W. H. 1876 A
Report on a geological examination of the section of the bluff recently exposed by the C. R. I. & P. R. R.
Proc. Davenport Acad. Sci., I, 96-99.

Pravoslavlev, P. A. 1916 A
Sur la question du cingulum extremitatis thoracicæ d'*Elasmosaurus* Cope.
Bull. Acad. Sci. St. Pétersb. (Pétrograd), (6), X, 327-342, 1 pl.
References to the literature in foot-notes. Text in Russian.

—— 1918 A
Sur la distribution géologique des elasmosaures.
Bull. Acad. Sci. Russ. (6), XII, pt. ii, 1955-1978, 2325-2343.

Preble, Edward A. 1923 A
Mammals of the Pribilof Islands.
N. A. Fauna, XLVI, 102-128, pl. vii.

Prein, Fritz 1914 A
Die Entwickelung des vorderen Extremitätenskelettes beim Haushuhn.
Anat. Heft, Abt. 1, LI, 643-690, pls. xxi, xxii, 11 text-figs.
Appended is a bibliography of 20 titles.

Preiswerk, Gustav 1895 A
Schmelzstructur und Phylogenie.
Anat. Anz., XI, 433-436, 5 figs.

Preller, Wilhelm 1907 A
Zur Kenntnis der Morphologie und postembryonalen Schädelmetamorphose von *Hydrochœrus capybara* im Vergleich mit den Schädeln der übrigen Caviiden und Beschreibung und Vergleichung zweier Schädel von *Dinomys branickii.*
Arch. Naturges., LXXIII Jahrg., Bd. 1, 377-422, pls. ix-xiv.
The bibliography contains 27 titles.

Prentiss, Daniel Webster 1903 A
Description of an extinct mink from the shell heaps of the Maine coast.
Proc. U. S. Nat. Mus., XXVI, 887-888, figs. a-c.
Describes *Lutreola macrodon.*

Preobrajensky, J. A. 1911 A
Ueber einige Vertreter der Familie Psammosteidæ Ag.
Sitz.-Ber. naturf. Ges. Dorpat, XIX, 19-36, pls. i, ii.
The text is in Russian. There is a bibliography of 13 titles.

Prevost, Constant 1825 A
Observations sur le gisement du mégalosaure fossile.
Bull. Soc. Philom. Paris, 1825, 41-43.

Price, George McCready 1923 A
The new geology: A text-book for colleges, normal schools, and training schools; and for the general reader.
Mountain View, California. Pages 1-706, with 452 figs.
"This alleged historical order of the fossils is clearly a scientific blunder," p. 676.
Reviewed in Science (n.s.), LXIII, 1926, 197-199.

Priem, F. 1896 B
Sur les poissons de la craie phosphatée des environs de Péronne.
Bull. Soc. géol. France (3), XXIV, 9-23, pls. i, ii.

—— 1898 B
Sur la faune ichthyologique des assises montiennes du bassin de Paris, et en particulier sur *Pseudolates heberti* Gervais sp.
Bull. Soc. géol. France (3), XXVI, 399-412, with pls. x, xi.

Priem, F.—Continued 1900 A

Sur les poissons fossiles du gypse de Paris.

Bull. Soc. géol. France (3), XXVIII, 841-860, pls. xv, xvi.

Abstract in Geol. Centralbl., I, 476.

—— 1900 B

L' "Helicoprion."

La Nature, XXVIII, 121-122, 3 figs.

—— 1901 A

Sur les poissons de l'Éocène Inférieur des environs de Reims.

Bull. Soc. géol. France (4), I, 477-504, pls. x, xi, 10 text-figs.

—— 1903 A

Sur les poissons fossiles des phosphates d'Algérie et de Tunisie.

Bull. Soc. géol. France (4), III, 393-406, pl. xiii, 3 text-figs.

—— 1904 A

Sur les poissons fossiles des terrains tertiaires supérieurs de l'Hérault.

Bull. Soc. géol. France (4), IV, 285-294, 12 text-figs.

—— 1906 A

Sur les poissons fossiles du Stampien du bassin Parisien.

Bull. Soc. géol. France (4), VI, 195-205, pl. viii, 11 text-figs.

Abstract in Geol. Centralbl., XI, 174-175.

—— 1906 B

Sur les otolithes des poissons éocenès du bassin parisien.

Bull. Soc. géol. France (4), VI, 265-280, 51 figs.

Abstracts in Geol. Centralbl., XI, 175-176; Rev. crit. Paléozool., XI, 93.

—— 1907 A

Note sur les poissons fossiles de Madagascar.

Bull. Soc. géol. France (4), VII, 462-465, 8 text-figs.

—— 1907 B

Sur des vertébrés de l'Éocène d'Egypte et de Tunisie.

Bull. Soc. géol. France (4), VII, 412-419, pls. xv, xvi, 2 text-figs.

—— 1908 A

Étude sur le genre *Lepidotus*.

Ann. Paléont. Paris, III, fasc. i, 1-19, pls. i, ii.

There are numerous references to the literature of the subject.

Priem, F.—Continued 1908 B

Étude des poissons fossiles du bassin parisien.

Memoir published by the Annales de Paléontologie. 1-144, 5 pls., 74 text-figs.

Abstract in Rev. crit. Paléozool., XIII, 82.

Lists are presented of the fishes that occur in each formation.

—— 1909 A

Note sur des poissons fossiles des phosphates de Tunisie et d'Algérie.

Bull. Soc. géol. France (4), IX, 315-324, 46 text-figs.

—— 1909 B

Sur un pycnodonte du Sénonien supérieur de Tunisie.

Bull. Soc. géol. France (4), IX, 324-326, 1 text-fig.

—— 1911 A

Sur des otolithes de poissons fossiles des terrains tertiaires supérieurs de France.

Bull. Soc. géol. France (4), XI, 39-46, 9 text-figs.

—— 1911 B

Poissons fossiles de la République Argentine. I: Sur quelques poissons fossiles du Patagonien. II: Sur des poissons fossiles du Tertiaire supérieur du Parana.

Bull. Soc. géol. France (4), XI, 329-340, pls. iii, iv, 5 text-figs.

Abstract in Geol. Centralbl., XIX, 703.

—— 1911 C

Étude des poissons fossiles du bassin parisien (Supplement).

Ann. Paléont. Paris, VI, fasc. 1, 1-44, pls. i-v, 42 text-figs.

Abstract in Rev. crit. Paléozool., XV, 156-157.

—— 1912 A

Sur les poissons fossiles des terrains tertiaires supérieurs du sud de la France.

Bull. Soc. géol. France (4), XII, 213-245, pls. vi, vii, 23 text-figs.

Abstracts in Geol. Centralbl., XX, 707; Rev. crit. Paléozool., XVII, 83.

—— 1912 B

Sur des poissons des terrains secondaires du sud de la France.

Bull. Soc. géol. France (4), XII, 250-271, pls. viii, ix, 6 text-figs.

Abstract in Geol. Centralbl., XX, 707, Rev. crit. Paléozool., XVII, 85.

—— 1913 A

Sur les poissons fossiles des phosphates remaniés du Rethélois.

Bull. Soc. géol. France (4), XIII, 159-162.

Priem, F.—Continued 1914 A
Sur les poissons fossiles des terrains tertiaires supérieur du sud-ouest de la France.
Bull. Soc. géol. France (4), XIV, 119-131, pl. iii, 33 text-figs.

—— 1914 B
Sur des otolithes de poissons fossiles des terrains tertiaires supérieurs du sud-ouest de la France.
Bull. Soc. géol. France (4), XIV, 244-278, 74 text-figs.

—— 1914 C
Sur les vértebrés du crétacé et de l'éocène d'Egypte.
Bull. Soc. géol. France (4), XIV, 366-382, pl. x, 2 text-figs.
References to the literature in foot-notes.

Prince, Edward E. 1885 A
On the nest and development of *Gasterosteus spinachia.*
Ann. Mag. Nat. Hist. (5), XVI, 487-496, pl. xiv.

—— 1887 A
Points in the development of the pectoral fin and girdle in teleosteans.
Rep. Brit. Assoc. Adv. Sci., LVI, Birmingham, 1886, 679-698.

Probst, J. 1886 B
Fossile Wirbel von Haien und Rochen aus der Molasse von Baltringen, O. A. Laupheim.
Jahresh. Ver. Naturk. Württemb., XLII, 301-315, pl. ix.

Proctor, Joan B. 1919 A
On the skull and affinities of *Rana subsigillata.*
Proc. Zool. Soc. Lond., 1919, 21-27, 2 figs.

—— 1921 A
On the variation of the scapula in the batrachian groups Aglossa and Arcifera.
Proc. Zool. Soc. Lond., 1921, 197-214, 10 figs.

—— 1922 A
A study of the remarkable tortoise *Testudo loveridgii* Blgr., and the morphogeny of the chelonian carapace.
Proc. Zool. Soc. Lond., 1922, 483-526, pls. i-iii, text-figs. 1-21.

Prosser, Charles S. 1913 A
The Huron and Cleveland shales of northern Ohio.
Jour. Geol., XXI, 323-362, 8 text-figs.

Provancher, Léon 1869 A
Un morse fossile.
Naturaliste Canad., II, 19.
Records finding of skeleton of walrus at Bic, Quebec.

Puccioni, Nello 1908 A
Di alcune omologie fra le ossa dello scheletro cefalico e viscerale dell'uomo e dei cranioti inferiori.
Arch. Antropol. Etnol., XXXVIII, 37-85.
The bibliography presents 161 titles.

Pütter, August 1923 A
Zur Physiologie der Riesentiere.
Zool. Jahrb. Zool., XL, 217-240.

Pugh, David 1904 A
The teeth as evidences of age of horses.
Vet. Record, XVII, 3.

Puntigan, Franz 1925 A
Ein Beitrag zur Anatomie des äusseren Gehörganges des Hausschweines.
Anat. Anz., LIX, 470-472, 2 figs.

Pusch, G. G. 1840 A
Über beiden fossilen Hirsch-Arten, die gewöhnlich mit dem Namen *Cervus alces fossilis* and *C. elaphus fossilis* bezeichnet werden.
Neues Jahrb. Min. Geogn. Geol., 1840, 69-82.

Putnam, Charles E. 1886 A
Elephant pipes and inscribed tablets in the museum of the Davenport Academy of Natural Sciences, Davenport, Iowa.
Proc. Davenport Acad. Sci., IV, 253-299, 3 figs.
This article is followed by 48 pages of correspondence, extracts from journals, and notes, all on the subject of elephant pipes and inscribed tablets. The whole was published separately with pages 1-96.

Putnam, F. W. 1874 A
Notes on *Liparis, Cyclopterus* and their allies.
Proc. Amer. Assoc. Adv. Sci., XXII, Portland, 1873, B, 335-340.

—— 1884 B
List of additions to the museum and library for the year 1883.
Rep. Peabody Mus. Harv., XVII, 1883 (1884), 368-379.

—— 1886 A
Report of the Curator.
Rep. Peabody Mus. Harv., XVIII, 401-428.

Putnam, F. W.—Continued 1890 A

New evidences of the contemporaneity of man with the mastodon and mammoth.

Proc. Bost. Soc. Nat. Hist., XXIV, 468.

—— 1899 A

[On finding of skulls and bones of Indian dogs.]

Rep. Harvard Coll., 1897-98, 269.

—— 1900 A

The exploration of the Trenton gravels and of the Delaware Valley.

Rep. Amer. Mus. Nat. Hist. for 1899, 15-16.

Reprinted in E. Volk's *Archæology of the Delaware Valley*. Papers Peabody Mus., V, 248-249.

—— 1900 B

Implements and extinct animals dredged from Alifia River, Florida.

Rep. Harvard Coll., XXXIII (1898-99), 271-279.

—— 1906 A

Evidence of the work of man on objects from Quaternary caves in California.

Amer. Anthrop. (2), VIII, 229-235, pls. XV, XVI.

Included in the paper is a statement by W. D. Matthew and J. W. Gidley. The paper is reviewed in Nature, LXXV, 156.

—— 1911 A

Editorial note.

Pap. Peabody Mus. Amer. Archæol., V, pages v-vii.

—— 1911 B

Parts of reports of the department of anthropology, American Museum of Natural History, New York, 1899, 1902.

Pap. Peabody Mus. Archæol., V, 248-249.

Pychlau, Waldemar 1908 A

Untersuchungen an den Brustflossen einiger Telostier.

Jena. Zeitschr. Naturwiss, XLIII, 692-728, pls. XXV-XXVII.

There is a bibliography of 20 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 110.

Pycraft, W. P. 1893 A

On a point in the mechanism of the bill in birds.

Ibis (6), V, 361-364.

—— 1894 B

The wing of *Archæopteryx*. Part II.

Nat. Sci., V, 437-448, pl. IV, 7 text-figs.

Pycraft, W. P.—Continued 1900 A

On the morphology and phylogeny of the Palæognathæ (Ratitæ and Crypturi) and Neognathæ (Carinatæ).

Trans. Zool. Soc. Lond., XV, 149-290, pls. XLIII-XLV, 10 text-figs.

—— 1900 B

The story of bird life.

8vo., London, 1-244 pages, 6 figs.

—— 1900 C

Contributions to the osteology of birds: Part IV.

Proc. Zool. Soc. Lond., 1899 (1900), 1018-1046, pl. LXXII, 3 text-figs.

The bibliography presents 20 titles.

—— 1901 A

Some points in the morphology of the palate of the Neognathæ.

Jour. Linn. Soc. Zool., XXVIII, 343-357, pls. XXXI, XXXII.

—— 1902 A

Contributions to the osteology of birds. Part V: Falconiformes.

Proc. Zool. Soc. Lond., 1902, I, 277-320, pls. XXXI-XXXIII, 5 text-figs.

For a review see Science (n.s.), XVII, 1903, 509-511.

—— 1902 B

The bird's wing, and the problem of diastataxy.

Trans. Norfolk (Eng.) Soc., VII, 312-327, 5 figs.

There is a bibliography of 12 titles.

—— 1903 A

Contributions to the osteology of birds. Part VI: *Cuculiformes*.

Proc. Zool. Soc. Lond., 1903, I, 258-291, pl. XXII, 6 text-figs.

—— 1903 B

A contribution towards our knowledge of the morphology of the owls. Pt. II: Osteology.

Trans. Linn. Soc. Lond. (2), IX, 1-46, pls. I, II, 3 text-figs.

—— 1903 C

The claws on the wings of birds.

Knowledge, XXVI (n.s. XVIII), 221-224.

—— 1905 A

The nation's latest acquisition.

Knowledge, II, 128-129, 2 figs.

Refers to replica of *Diplodocus* at London.

Pycraft, W. P.—Continued 1906 A

Notes on a skeleton of the musk-duck, *Biziura lobata,* with special reference to skeletal characters evolved in relation to the diving habits of this bird.

Jour. Linn. Soc. Zool., XXIX, 396-407, pl. xxxix.

—— 1906 B

The origin of birds.

Knowl. Scient. News (n.s.), III, 531-532, 1 fig.

Review in Amer. Jour. Sci. (4), XXII, 547-548.

—— 1907 A

Contributions to the osteology of birds. Pt. IX: Tyranni, Hirundines, Musicapæ, Lanii, and Gymnorhines.

Proc. Zool. Soc. Lond., 1907, 352-379, text-figs. 101-104.

—— 1909 A

Teeth and their substitutes.

Scient. Amer. Suppl., LXVIII, 204-205, 8 figs.

—— 1910 A

A history of birds.

8vo. London, i-xxxi+1-458 pages, 37 plates, 50 text-figs.

Reviewed in Ann. Mag. Nat. Hist. (8), VI, 333-336.

—— 1922 A

The Nebraska tooth.

Nature, CX, 707-708.

Quackenbush, L. S. 1909 A

Notes on Alaskan expeditions of 1907 and 1908.

Bull. Amer. Mus. Nat. Hist., XXVI, 87-130, pls. xvii-xxv, 10 text-figs.

Abstract in Geol. Centralbl., XVI, 57-58.

Quenstedt, F. A. 1861 A

Bemerkungen über *Archegosaurus.*

Neues Jahrb. Min. Geogn. Geol., 1861, 204-300, pl. iii.

Rabinerson, A. 1925 A

Beiträge zur vergleichenden Anatomie der Wirbelsäule der Knorpelfische.

Anat. Anz., LIX, 433-454, 481-495, 513-522, 560-565, 12 figs.

Rabl, Carl 1892 A

Ueber die Metamerie des Wirbeltierkopfes.

Verh. Anat. Ges., VI, 104-135, pl. ii, 4 text-figs.

Rabl, Carl—Continued 1901 A

Gedanken und Studien über den Ursprung der Extremitäten.

Zeitschr. wiss. Zool., LXX, 474-558, pls. xxii, xxiii, 35 text-figs.

Numerous references are made to the works of other authors.

—— 1903 A

Ueber einige Probleme der Morphologie.

Anat. Anz. Ergänzungsh., XXIII, 154-190, pls. i, ii, 23 text-figs.

Radcliffe, Lewis 1916 A

The sharks and rays of Beaufort, North Carolina.

Bull. U. S. Bur. Fish., XXXIV, 239-284, pls. xxxviii-xlix, 26 text-figs.

There is a bibliography of 27 papers.

—— 1917 A

Notes on the taxonomic value of dermal denticles and teeth in identifying sharks.

Copeia., XLII, 25-28.

Rae, John 1879 A

On some physical properties of ice; on the transposition of boulders from below to above the ice; and on mammoth remains.

Kansas City Rev. Sci. Indust., II, 669-674.

Raffelt, R. 1877 A

Ueber einen Fund von 19 Zähnen von *Ptychodus latissimus* Agassiz in einer Plänerkalkgrube in Settenz bei Teplitz.

Verh. geol. Reichsanst., 1877, 179-282.

Rafinesque, Constantine Samuel 1815 A

Analyse de la nature; ou tableau de l'universe et des corps organizés.

Palerme. Pages i-224.

—— 1832 A

Odocoileus speleus.

Atlant. Jour., I, 109-110, 1 fig.

—— 1832 B

Remarks on the "Monthly Journal of Geology and Natural Science" of G. W. Featherstonaugh, for May 1832 (but published only in July).

Atlant. Jour., I, 110-114.

Ranking, John 1828 A

Remarks on some quadrupeds supposed to be extinct.

Quart. Jour. Sci. Lit. Art., Oct. to Jan., 1828, 350-371.

Ransome, Frederick Leslie 1919 A
The copper deposits of Ray and Miami, Arizona.
U. S. Geol. Surv. Profess. Pap., CXV, 1-192, maps and figs.

Raspé, R. E. 1769 A
Dissertio epistolaris de ossibus et dentibus elephantum aliarumque belluarum in America septentrionali aliisque borealibus regionibus; quæ indigenarum belluarum esse ostenditur.
Phil. Trans. Roy. Soc. Lond., LIX, 126-137.

Rath, Gerhard 1886 A
Wahrnehmungen auf der Reise von Zacatecas nach Mexico.
Verh. naturh. Ver. Rheinl., XLIII, Corres.-bl., 89-130.

Rathke, Heinrich 1822 A
Bemerkungen über den Bau des *Cyclopterus lumpus* (Lumpfisches, Seehasen).
Deutsch. Arch. Physiol., VII, 498-524, pl. vi.

—— 1846 A
Notice préliminaire sur le développement des chéloniens.
Ann. Sci. nat. (3), V, 161-170.

Rautenberg, Max 1906 A
Über *Pseudolestodon hexaspondylus.*
Palaeontogr., LIII, 1-50, pls. i-vi, 4 text-figs.

Rauther, M. 1913 A
Fische. Pisces.
Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena.), III, 1055-1107, 56 figs.

—— 1919 A
Notiz über das Integument von *Balistes.*
Anat. Anz., LII, 214-218, 4 figs.

Raymond, Percy E. 1907 A
On the discovery of reptilian remains in the Pennsylvanian near Pittsburg, Pennsylvania.
Science (n.s.), XXVI, 835-836.
Abstract in Rev. crit. Paléozool., XII, 85.

—— 1925 A
The Anaspida and the problem of the origin of the vertebrates.
Amer. Jour. Sci. (5), X, 433-436.

—— 1925 B
Two new fossil fishes from Alberta.
Amer. Jour. Sci. (5), X, 551-554, 2 figs.

Read, M. C. 1873 A
Geology of Trumbull, Lake, and Geauga Counties [Ohio].
Geol. Surv. Ohio, I, pt. 1, 493-533, maps and figures.

Reagan, Albert B. 1903 A
Geology of the Jemez-Albuquerque region, New Mexico.
Amer. Geologist, XXI, 67-111, pls. iv-xii.

Reche, O. 1905 A
Über eine neue Equidenart aus der Pampasformation.
Beitr. Pal. Geol. Oesterr.-Ung., XVIII, 1905, 225-241, pl. xxii, 14 text-figs.

—— 1905 B
Ueber Form und Funktion der Halswirbelsäule der Zahnwale.
Jena. Zeitschr. Naturwiss., XL, 150-252, 31 text-figs.

Redfield, J. H. 1888 A
A catalogue of the fossil fishes of the United States as far as known, with descriptions of those found in the New Red Sandstone.
Mon. U. S. Geol. Surv., XVI, 27, 30, 34-35, 45, 46-47, 64.
A report read in 1854 but not published. Extracts therefrom are given in Newberry's monograph on fossil fishes and plants issued in 1888, as quoted above.

Redfield, W. C. 1842 A
On newly discovered ichthyolites in the New Red sandstone of New Jersey.
Proc. Geol. Soc. Lond., IV, 23.
See also Philos. Mag. Lond. (3), XXIII, 186.

Reed, H. D. 1920 A
The morphology of the sound-transmitting apparatus in caudate Amphibia and its phylogenetic significance.
Jour. Morphol., XXXIII, 325-375, 6 pls., 18 text-figs.
The bibliography presents 27 titles.

—— 1924 A
The morphology and growth of the spines of siluroid fishes.
Jour. Morphol., XXXVIII, 431-451, 12 figs.

Reed, W. H. 1909 A
[Note on dinosaur quarry at Como, Wyoming.]
Proc. U. S. Nat. Mus., XXXVI, 198-199.

Reese, Albert M. 1906 A
Anatomy of *Cryptobranchus alleghaniensis.*
Amer. Naturalist, XL, 287-326, 14 figs.
There is a bibliography of 33 titles.

Reese, Albert M.—Continued 1908 A
The development of the American alligator (*A. mississippiensis*).
Smithson. Misc. Coll., LI, No. 1, 1-66, pls. i-xxiii.

—— 1910 A
The home of the alligator.
Pop. Sci. Month., LXXVII, 365-372.

Reeside, J. B. 1923 A
The fauna of the so-called Dakota formation of northern central Colorado and its equivalent in southeastern Wyoming.
U. S. Geol. Surv. Profess. Pap., CXXXI, 199-205, pls. xlv-l.

—— 1924 A
Upper Cretaceous and Tertiary formations of the western part of the San Juan basin, Colorado and New Mexico.
U. S. Geol. Surv. Profess. Pap., CXXXIV, 1-70, pls. i-iv.

Regalia, E. 1880 A
L'extrémité carpienne du cubitus existe dans les Chéiroptères.
Zool. Anz., III, 519-522.

Regan, C. T. 1902 A
On the systematic position of *Luvaris imperialis* Rafinesque.
Ann. Mag. Nat. Hist. (7), X, 278-281.

—— 1903 A
On the classification of the fishes of the suborder Plectognathi.
Proc. Zool. Soc. Lond., 1902, II, 284-303, pls. xxiv, xxv, text-figs. 56-59.

—— 1903 B
On the systematic position and classification of the gadoid, or anacanthine, fishes.
Ann. Mag. Nat. Hist. (7), XI, 459-466, 2 text-figs.

—— 1903 C
On the skeleton and systematic position of *Luvaris imperialis*.
Ann. Mag. Nat. Hist. (7), XI, 372-374, 1 fig.

—— 1904 A
The phylogeny of the Teleostomi.
Ann. Mag. Nat. Hist. (7), XIII, 329-349, pl. vii, 4 text-figs.
Reviewed in Amer. Naturalist, XXXIX, 91-94. Abstracts in Geol. Centralbl., V, 485; Rev. crit. Paléozool., VIII, 157-159.

Regan, C. T.—Continued 1906 A
A classification of the selachian fishes.
Proc. Zool. Soc. Lond., 1906, II, 722-758, text-figs. 115-124.
Comments on in Sci. Progress, I, 464.
Abstracts in Rev. crit. Paléozool., XI, 86-89; Sci. Progress, I, 464.

—— 1908 A
A synopsis of the sharks of the family Scyliorhinidæ.
Ann. Mag. Nat. Hist. (8), I, 453-465.

—— 1908 B
A synopsis of the sharks of the family Squalidæ.
Ann. Mag. Nat. Hist. (8), II, 39-57.

—— 1908 C
A synopsis of the sharks of the family Cestraciontidæ.
Ann. Mag. Nat. Hist. (8), I, 493-497.

—— 1908 D
A revision of the sharks of the family Orectolobidæ.
Proc. Zool. Soc. Lond., 1908, 347-364.

—— 1909 A
On the anatomy and classification of the scombroid fishes.
Ann. Mag. Nat. Hist. (8), III, 66-75.

—— 1909 B
The classification of teleostean fishes.
Ann. Mag. Nat. Hist. (8), III, 75-86.
Brief abstract in Amer. Naturalist, XLIII, 1909, 565.

—— 1909 C
The species of three-spined sticklebacks (*Gastrosteus*).
Ann. Mag. Nat. Hist. (8), IV, 435-437.

—— 1910 A
The caudal fin of the Elopidæ and of some other teleostean fishes.
Ann. Mag. Nat. Hist. (8), V, 354-358, 2 text-figs.

—— 1910 B
On the caudal fin of the Clupeidæ, and on the teleostean urostyle.
Ann. Mag. Nat. Hist. (8), V, 531-533, 2 text-figs.

—— 1910 C
The origin and evolution of the teleostean fishes of the order Heterosomata.
Ann. Mag. Nat. Hist. (8), VI, 484-496, 3 figs.

Regan, C. T.—Continued 1911 A

The anatomy and classification of the teleostean fishes of the orders Berycomorphi and Xenoberyces.

Ann. Mag. Nat. Hist (8), VII, 1-9, pl. i, 2 text-figs.

Abstracts in Amer. Naturalist, XLV, 435; Rev. crit. Paléozool., XV, 153.

—— 1911 B

The anatomy and classification of the teleostean fishes of the order Iniomi.

Ann. Mag. Nat. Hist. (8), VII, 120-133, 7 text-figs.

Abstract in Rev. crit. Paléozool., XV, 152.

—— 1911 C

The anatomy and classification of the teleostean fishes of the order Salmopercæ.

Ann. Mag. Nat. Hist. (8), VII, 294-296.

—— 1911 D

The osteology and classification of the teleostean fishes of the order Microcyprini.

Ann. Mag. Nat. Hist. (8), VII, 320-327, pl. viii.

—— 1911 E

The classification of the teleostean fishes of the order Synentognathi.

Ann. Mag. Nat. Hist. (8), VII, 327-335, pl. ix, 1 text-fig.

—— 1911 F

The classification of the teleostean fishes of the order Ostariophysi. I: Cyprinoidea.

Ann. Mag. Nat. Hist. (8), VIII, 13-32, pl. ii, 1 text-fig.

—— 1911 G

The classification of the teleostean fishes of the order Ostariophysi. II: Siluroidea.

Ann. Mag. Nat. Hist. (8), VIII, 553-577, 3 text-figs.

—— 1911 H

The osteology and classification of the gobioid fishes.

Ann. Mag. Nat. Hist. (8), VIII, 729-733, 2 figs.

—— 1912 A

The origin of the chimæroid fishes.

Proc. internat. Zool. Congr., VII, Boston, 1907, 836-837.

Separates appear to have been issued in 1910.

Abstracts in Rev. crit. Paléozool., XV, 32.

Regan, C. T.—Continued 1912 B

Notes on the classification of the teleostean fishes.

Proc. internat. Zool. Congr., VII, Boston, 1907, 838-853.

Reprints of this paper may have appeared in 1910.

—— 1912 C

The classification of the blennoid fishes.

Ann. Mag. Nat. Hist. (8), X, 265-280, 4 figs.

—— 1912 D

The osteology and classification of the teleostean fishes of the order Apodes.

Ann. Mag. Nat. Hist. (8), X, 377-387, 2 figs.

—— 1913 A

The osteology and classification of the teleostean fishes of the order Scleroparei.

Ann. Mag. Nat. Hist. (8), XI, 169-184, 5 text-figs.

—— 1913 B

The classification of the percoid fishes.

Ann. Mag. Nat. Hist. (8), XII, 111-145.

—— 1913 C

A revision of the cyprinodont fishes of the subfamily Pœciliinæ.

Proc. Zool. Soc. Lond., 1913, 977-1018, pls. xcix-ci, text-figs. 168-173.

—— 1913 D

The systematic position and geographical distribution of the Galaxidæ and Haplochitonidæ.

Trans. Roy. Soc. Edinb., CLIX, 289-291.

—— 1914 A

The systematic arrangement of the fishes of the family Salmonidæ.

Ann. Mag. Nat. Hist. (8), XIII, 405-408, 3 text-figs.

—— 1916 A

The British fishes of the subfamily Clupeinæ and related species in other seas.

Ann. Mag. Nat. Hist. (8), XVIII, 1-19, pls. i-iii.

—— 1916 B

Freshwater fish-fauna of South America.

Proc. Zool. Soc. Lond., 1916, 546-547.

Regan, C. T.—Continued 1917 A
A revision of the clupioid fishes of the genera *Pomolobis, Brevoortia,* and *Dorosoma.*
Ann. Mag. Nat. Hist. (8), xix, 297-316.

—— 1922 A
The distribution of the fishes of the order Ostariophysi.
Bijdr. Dierk. Amsterdam, xxii (Feestnum. Max Weber), 203-208.
There are 12 titles recorded in the bibliography.

—— 1922 B
The classification of the fishes of the family Cichlidæ.
Ann. Mag. Nat. Hist. (9), x, 249-264.

—— 1923 A
The classification of the stomiatoid fishes.
Ann. Mag. Nat. Hist. (9), 612-614.

—— 1923 B
The skeleton of *Lepidosteus,* with remarks on the origin and evolution of the lower neopterygian fishes.
Proc. Zool. Soc. Lond., 1923, 445-461, 8 figs.

—— 1924 A
Reversible evolution, with examples from fishes.
Proc. Zool. Soc. Lond., 1924, 175-176.

—— 1924 B
A young swordfish (*Xiphias gladius*).
Ann. Mag. Nat. Hist. (9), xiii, 224-225, 1 fig.

Regnault, Felix 1903 A
Les causes de la polydactylie.
Le Naturaliste (2), xxv, 108-110.

Rehn, James A. G. 1901 A
The application of *Didelphis marsupialis* Linnæus.
Amer. Naturalist, xxxv, 147-149.

Rehs, Jakob 1914 A
Beiträge zur Kenntnis der makroskopischen und mikroskopischen Anatomie insbesondere der Topographie des elastischen Gewebes des Palatum durum der Mammalia.
Zeitschr. wiss. Zool., cix, 1-127, pls. i-iv, 7 text-figs.
This article is followed by a list of 95 papers appertaining to the subject discussed.

Reichenau, W. 1900 A
Notizen aus dem Museum zu Mainz.
Neues Jahrb. Min. Geol. Pal., 1900, ii, 52-62, 1 text-fig.
Pliocene and Pleistocene geology and faunas.

Reichenau, W.—Continued 1912 A
Einiges über Schädel und Gebiss der Biber (Castorinæ).
Jahrb. Nassau. Ver. Naturk., lxv, 208-226, pls. iii, iv.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 100.

—— 1915 A
Beiträge zur näheren Kenntnis fossiler Pferde aus deutschem Pleistozän, etc.
Abh. hess. geol. Landesanst., vii, 1-155, 14 pls.
Abstract in Geol. Zentralbl., xxiii, 124.

Reichenbach, H. G. L. 1847 A
Systematisches [of Basilosaurus].
In Carus, C. G., 1847 A, 13-15, pls. i-vii.

—— 1853 A
Avium systema naturale. Das natürliche System der Vögel.
8vo., Berlin, i-viii+i-xxxi+1-36 pages, 100 pls.

Reichenow, Anton 1877 A
Systematische Uebersicht der Schreitvögel (*Gressores*), einer natürlichen, die Ibididæ, Ciconidæ, Phœnicopteridæ, Scopidæ, Balænicipidæ und Ardeidæ umfassenden Ordnung.
Jour. Ornith., xxv, 113-171, 225-227.

—— 1913 A
Die Vögel. Handbuch der systematischen Ornithologie.
Erster Band, i-viii+1-592 pages, 185 text-figs.

—— 1914 A
Die Vögel. Handbuch der systematischen Ornithologie.
Zweiter Band, i-viii+1-627 pages, 273 text-figs.

Reichert, C. 1837 A
Visceralbogen der Wirbelthiere im Allgemeinen und deren Metamorphosen bei den Vögeln und Säugethieren.
Arch. Anat. Physiol. Med., 1837, 120-222, pls. vii, viii.

Reichert, K. B. 1849 A
Zur Kontroverse über den Primordialschädel.
Arch. Anat. Physiol. Med., 1849, 442-516.

Reid, G. A. 1898 A
The evolution of horns.
Nat. Sci., xiii, 359.

Reinach, A. 1900 A

Schildkrötenreste im Mainzer Tertiärbecken und in benachbarten, ungefähr gleichalterigen Ablagerungen.

Abh. Senckenb. Naturf. Ges., XXVIII, 1-135, 44 pls.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 141-144.

Reinhardt, J. 1874 B

Structure anatomique des ailes dans la famille des pétrels.

Jour. Zool. Paris, III, 139-144, 2 text-figs.

—— 1878 A

Kaempedovendyr-Slaegten *Cœlodon.*

Danske Vid. Selsk. Skr. (5), XII, 254-350, pls. i-v.

Includes a résumé in French.

Reinhardt, Richard 1908 A

Ueber Pleiodaktylie beim Pferde.

Anat. Hefte, Arb., XXXVI, 1-68, 13 figs.

The bibliography includes 103 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 142.

Reiniger, Albert 1900 A

Anatomie und Ontogenie der beiden Dentitionen von *Lepus cuniculus.*

Philosophical dissertation. Erlangen, 1-29, 9 figs.

Reis, Caroline 1905 A

Contribution à la morphologie des ossicules de Weber et de la vessie natatoire chez les *Siluroides* [*Amiurus*] *nebulosus.*

Bull. internat. Acad. Sci. Cracovie, 1905, 220-229; 890, pl. vi.

There is a bibliography of 14 titles.

Reis, Otto M. 1887 A

Ueber *Belonostomus, Aspidorhynchus,* und ihre Beziehungen zum lebenden *Lepidosteus.*

Sitz.-Ber. Akad. Wiss. München, XVII, 151-177, pls. i, ii.

—— 1893 A

Untersuchungen über die Petrificirung der Muskulatur.

Arch. mikr. Anat. Bonn., XLI, 492-584, pls. xxix-xxxi.

Reviewed in Jahrb. Min. Geol. Pal., 1895, II, Ref, 151-159.

—— 1894 A

Zur Kenntnis des Skelets der Acanthodinen.

Geognost, Jahresh., VI, 1893 (1894), 49-65, 6 figs.

Reis, O. M.—Continued 1884 B

Ueber Phosphoritisirung der Cutis, der Testicle und des Rückenmarks bei fossilen Fischen.

Arch. mikr. Anat. Bonn., XLIV, 87-119, pl. vi.

Reviewed in Jahrb. Min. Geol. Pal., 1895, II, Ref., 151-159.

—— 1900 A

Cœlacanthus lunzensis Teller.

Jahrb. geol. Reichsanst Wien, L, 187-192, pls. ix, x.

See abstract in Geol. Centralbl., I, 543.

—— 1922 A

Ueber das Hautskelett von *Iguanodon.*

Centralbl. Min. Geol. Pal., 1922, 85-90, 1 fig.

Abstract in Geol. Zentralbl., XXVIII, 92.

Reissner, E. 1859 B

Ueber die Schwimmblase und den Gehörapparat einiger Siluroiden.

Arch. Anat. Physiol. Med., 1859, 421-438, pl. xii.

Remane, Adolf 1921 A

Zur Beurteilung der fossilen Anthropoiden.

Centralbl. Min. Geol. Pal., 1921, 335-339.

—— 1922 A

Beiträge zur Morphologie des Anthropoidengebisses.

Arch. Naturges., LXXXVII, Abt. A. Heft 11, 1-179, 31 figs.

In the bibliography are noted 92 titles.

Renevier, Eugène 1900 A

Heliocoprion de Karpinsky.

Bull. Soc. vaud. Sci. nat., XXXVI, Proc.-verb., vi-vii.

Rennie, John 1906 A

Accessory fins in *Raia batis.*

Anat. Anz., XXVIII, 428-431, 2 text-figs.

Repelin, J. 1916 A

Sur de nouvelles espèces de rhinocérotidés de l'Oligocéne de France.

C. R. Acad. Sci. Paris, CLXIII, 980-983.

—— 1918 A

Sur de nouvelles espèces du genre *Enteledon* Aymard, (*Elotherium*) Pomel, *Archæotherium* Leidy, *Oltinotherium* Delfortrie, *Pelonax* Cope.

C. R. Acad. Sci. Paris, CLXVI, 397-400.

Retterer, Ed. 1884 A

Contribution au dévelopment du squelette des extrémités chez les mammifères.

Jour. Anat. Physiol. Paris, XX, 467-614, pls. xxxii, xxxiii.

Retterer, Ed.—Continued 1905 A
Du tissu osseux des mammifères et des poissons.
C. R. Assoc. Anatomistes, vii, 120-126.
—— 1905 B
Technique et structure de l'os des mammifères.
C. R. Soc. Biol., lix, 204-207.
—— 1905 C
Du tissu osseux des poissons téléostéens.
C. R. Soc. Biol., lix, 246-248.
—— 1905 D
Des capsules osseuses.
C. R. Soc. Biol., lix, 366-368.
—— 1906 A
Evolution du tissu osseux.
Jour. Anat. Physiol. Paris, xlii, 193-238, 6 figs.
—— 1908 A
Structure comparée du tissu osseux.
C. R. Soc. Biol., lxiv, 485-488.
—— 1908 B
De l'ostéogenèse et du développement variable des éléments de la substance osseuse.
C. R. Soc. Biol., lxiv, 535-538.
—— 1916 A
De l'ossification de l'os pénien du chien et de la valeur morphologique du pénis.
C. R. Soc. Biol., lxxix, 764-769.
—— 1919 A
Structure de l'ivoire ou dentine.
C. R. Soc. Biol., lxxxii, 516-519.
—— 1919 B
Structure et origine de l'émail dentaire.
C. R. Soc. Biol., lxxxii, 571-574.
—— 1919 C
Du cortex de la racine des dents.
C. R. Soc. Biol. lxxxii, 618-621.
—— 1919 D
Structure et développement des dents composées.
C. R. Soc. Biol., lxxxii, 738-741.
—— 1919 E
Du cortical osseux des dents simples.
C. R. Soc. Biol. lxxxii, 1222-1225.
——, and A. **Lelièvre** 1910 A
Connexions et développement de l'appareil hyoïdien du chien.
C. R. Soc. Biol., lxviii, 952-955.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xvi, pt. 3, 73.

Retterer, Ed., and A. **Lelièvre**—Cont'd 1910 B
Variations de l'appareil hyoïdien des mammifères.
C. R. Soc. Biol., lxviii, 986-989.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xvi, 73.
—— —— 1912 A
Du développement et de la structure des os du coeur de quelques ruminants.
C. R. Soc. Biol., lxxii, 371-373.
——, and H. **Vallois** 1912 A
De la double rotule de quelques primates.
C. R. Soc. Biol., lxxiii, 379-382.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 174.
—— —— 1912 B
De la double rotule de quelques rongeurs.
C. R. Soc. Biol., lxxiii, 410-413.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 174.
—— —— 1912 C
Ébauche de rotule supérieure chez l'homme.
C. R. Soc. Biol., lxxiii, 432-435.
—— —— 1912 D
De la rotule et du genou chéiroptères.
C. R. Soc. Biol., lxxiii, 450-453.
—— —— 1912 E
De la rotule brachiale et du coude des chéiroptères.
C. R. Soc. Biol., lxxiii, 596-599.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xviii, pt. 3, 173.
Retzius, A. 1837 A
Bemerkungen über den innern Bau der Zähne, mit besonderer Rücksicht auf den in Zahnknochen vorkommenden Röhrenbau.
Arch. Anat. Physiol. Med., 1837, 486-566, pls. xxi, xxii.
—— 1849 A
Über die richtige Deutung der Seitenforsätze, an den Rücken- und Lendenwirbeln beim Menschen und bei den Säugethieren.
Arch. Anat. Physiol. Med., 1849, 593-685, 10 figs.
—— 1852 A
Zur Deutung der Seitenfortsätze an den Rücken- und Lendenwirbeln bei den Säugethieren.
Froriep's Tagsber., ii, 41-42.

Revilliod, P. 1915 A

Note préliminaire sur l'ostéologie des chiroptères fossiles des terrains tertaires.

Act. Soc. Sci. nat. Helvet., XCVII, 1915, pt. 2, 223-224.

—— 1916 A

Apropos de l'adaptation au vol chez les microchiroptères.

Verh. Naturf. Ges. Basel, XXVII, 156-160.

—— 1917 A

Fledermäuse aus der Braunkohle von Messel bei Darmstadt.

Abh. hess. geol. Landesanst., VII, 157-201, pl. i, 18 text-figs.

Rex, H. 1911 A

Neue Beiträge zur Entwicklung des Vorderkopfes der Vögel.

Morphol. Jahrb., XLIII, 209-289, 28 text-figs., pls. viii-xi.

Reynolds, S. H. 1897 A

The vertebrate skeleton.

Cambridge, Eng., 8vo., i-xvi+1-559 pages, 110 figs.

On pages 529-530 is a list of 89 authors referred to.

—— 1902 A

A monograph of the British Pleistocene Mammalia. The cave hyæna.

Palæontogr. Soc. Mon., II, pt. 1, 1-25, pls. i-xiv.

—— 1906 A

A monograph of the British Pleistocene Mammalia. The bears.

Palæontogr. Soc. Mon., II, pt. 2, 1-35, pls. i-viii, 6 text-figs.

The bibliography includes titles of 63 books and papers.

—— 1909 A

A monograph of the British Pleistocene Mammalia. The Canidæ.

Palæontogr. Soc. Mon., II, pt. 2, 1-28, pls. i-vi, 8 text-figs.

The bibliography includes titles of 66 books and papers.

—— 1910 A

British Pleistocene Canidæ.

Rep. Brit. Assoc. Adv. Sci., 79th meet., Winnipeg, 1909, 507.

—— 1912 A

A monograph of the British Pleistocene Mammalia. The Mustelidæ.

Palæontogr. Soc. Mon., II, pt. 4, 1-28, pls. i-viii, 10 text-figs.

The bibliography includes titles of 53 books and papers.

Rhoads, Samuel N. 1903 A

Fossil mammals of Pennsylvania and New Jersey.

Philadelphia, 1-266 pages, 8 plates, and a faunal map.

On papers 227-250 is an annotated list of the fossil mammals which have been reported from the two states named.

Review in Amer. Jour. Sci. (4), XVIII, 1904 161.

Rhumbler, Ludwig 1913 A

Hat das Geweih des Damhirsches [*Dama dama* (L.)] eine morphologische Drehung erfahren?

Zool. Anz., XLII, 577-586, 11 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 87.

—— 1913 B

Fehlt den Cerviden das Os Cornu?

Zool. Anz., XLII, 81-95, 15 figs.

The bibliography embraces 8 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 87.

—— 1914 A

Zur Entwicklungsmechanik des morphologischen Aufbaues der Hirschgeweihe.

Naturwiss. Berlin, II, 154-160, 11 figs.

Ricci, Arnaldo 1901 A

Mammiferi post-pliocenici di Kurgan in Siberia.

Boll. Soc. geol. Ital., XX, 368-393, pl. vi.

Rice, Edward L. 1920 A

The development of the skull in the skunk, *Eumeces quinquelineatus* L.

Jour. Morphol., XXIV, 119-220, pls. i-xii.

The bibliography occupies pages 211 to 216.

Rice, William North, and Herbert Ernest **Gregory** 1906 A

Manual of the geology of Connecticut.

Bull. Conn. Geol. Nat. Hist. Surv., VI, 1-273, pls. i-xxxi, 22 text-figs.

Review in Amer. Jour. Sci. (4), XXIII, 385-394.

Richards, R. W., and J. T. **Pardee** 1925 A

The Melrose phosphate field, Montana.

Bull. U. S. Geol. Surv., DCCLXXX, 1-26, maps.

Richardson, George B. 1907 A

(*Elephas columbi, Equus complicatus,* and *Tapirus haysii* from El Paso, Texas.)

Science (n.s.), XXV, 32.

Richardson, G. B.—Continued 1909 A
El Paso Folio.
Folio U. S. Geol. Surv., CLXVI, 1-86, 15 illustrations and 2 maps.

—— 1912 A
The Monument Creek group.
Bull. Geol. Soc. Amer., XXIII, 267-276, 1 text-fig.

—— 1915 A
Description of the Castle Rock [Col.] quadrangle.
Folio U. S. Geol. Surv., CXCVIII, 1-14, 3 maps, 2 sheets of illustrations.

Richardson, John 1829 A
Fauna boreali-americana; or the zoology of the northern parts of British America. Pt. I: Quadrupeds.
London, 1829, 4to., i-xlvi+1-300 pages, pls. i-xxviiii.

—— 1836 A
Fauna boreali-americana; or the zoology of the northern parts of British America. Pt. III: The Fish.
London, 1836, 4to., i-xv+1-327 pages, pls. lxxiv-xcv.

—— 1846 A
Report on the ichthyology of the seas of China and Japan.
Rep. Brit. Assoc. Adv. Sci., XV, Cambridge, 1845, 187-320.

Richter, Johannes 1911 A
Über *Hoplophorus.*
Palæontogr., LVII, 257-283, pls. xxii, xxiii, 6 text-figs.

Ridewood, W. G. 1894 A
On the hyoid arch of *Ceratodus.*
Proc. Zool. Soc. Lond., 1894, 632-640, 3 figs.
The bibliography cites 10 titles.

—— 1895 B
On the spiracle and associated structures in elasmobranch fishes.
Anat. Anz., XI, 425-433, 2 text-figs.

—— 1896 A
The teeth of fishes.
Nat. Sci., viii, 380-391, 16 figs.
There is a bibliography of 22 titles.

—— 1897 A
On the development of the vertebral column in *Pipa* and *Xenopus.*
Anat. Anz., XIII, 359-376, 4 figs.
There is a bibliography of 41 works.

—— 1897 B
Note on the extrabranchial cartilages of elasmobranch fishes.
Anat. Anz., XIII, 499-501.

Ridewood, W. G.—Continued 1897 C
On the structure and development of the hyobranchial skeleton and larynx in *Xenopus* and *Pipa;* with remarks on the affinities of the Aglossa.
Jour. Linn. Soc. Zool., XXVI, 53-128, pls. 8-11.
There is a bibliography of 44 titles.

—— 1897 D
On the restoration of some extinct reptiles.
Nat. Sci., XI, 190-196, 4 figs.

—— 1898 A
On the larval skeleton of the anurous batrachians, with special reference to the axial parts.
Jour. Linn. Soc. Zool., XXVI, 474-486, pl. xxxi.
The bibliography presents 15 titles.

—— 1899 A
Observations on the caudal diplospondyly of sharks.
Jour. Linn. Soc. Zool., XXVII, 46-59, 2 figs.
The bibliography furnishes citations of 14 works.

—— 1899 B
Note on the basibranchial skeleton of *Echinorhinus spinosus.*
Anat. Anz. XV, 346-348, 1 fig.

—— 1901 A
On the structure of the hairs of *Mylodon listai* and other South American Edentata.
Quart. Jour. Micr. Sci. (n.s.), XLIV, 393-411, pl. xxvi.

—— 1904 A
On the cranial osteology of the fishes of the families Elopidæ and Albulidæ, with remarks on the morphology of the skull in the lower teleostean fishes generally.
Proc. Zool. Soc. Lond., 1904, II, 35-81, text-figs. 8-18.

—— 1904 B
On the cranial osteology of the fishes of the families Mormyridæ, Notopteridæ and Hyodontidæ.
Jour. Linn. Soc. Zool., XXIX, 188-217.

—— 1905 A
On the skull of *Gonorhynchus greyi.*
Ann. Mag. Nat. Hist. (7), XV, 361-372, pl. xvi, 1 text-fig.

Ridewood, W. G.—Continued 1905 B

On the cranial osteology of the clupeoid fishes.

Proc. Zool. Soc. Lond., 1904, II, 448-493, text-figs. 118-143.

—— 1905 C

On the cranial osteology of the fishes of the families Osteoglossidæ, Pantodontidæ, and Phractolæmidæ.

Jour. Linn. Soc. Zool., XXIX, 252-282, pls. XXX-XXXII.

Brief abstract in Nature, LXXI, 381.

—— 1921 A

On the calcification of the vertebral centra in sharks and rays.

Phil. Trans. Roy. Soc. Lond. (B), CCX, 311-407, 38 text-figs.

The bibliography presents 32 titles.

—— 1922 A

Observations on the skull in fœtal specimens of whales of the genera *Megaptera* and *Balænoptera*.

Phil. Trans. Roy. Soc. Lond., CCXI, 209-272, 16 figs.

The bibliography records 35 titles.

Ridgeway, W. 1902 A

The origin of the thoroughbred horse.

Nature, LXVII, 187-188.

Abstract of paper read before the Cambridge (Eng.) Philosophical Society.

Ridgway, John L. 1926 A

Scientific illustrations.

Mus. Graphic, I, 16-17, 22, 3 figs.

Ridgway, Robert 1873 A

Catalogue of the ornithological collection of the Boston Society of Natural History.

Proc. Bost. Soc. Nat. Hist., XVI, 43-106.

—— 1875 A

Outlines of a natural arrangement of the Falconidæ.

Bull. U. S. Geol. Geog. Surv. Terrs. Hayden, I, No. 4, 225-231, pls. xi-xvii.

—— 1876 A

Studies of the American Falconidæ. Monograph of the Polybori.

Bull. U. S. Geol. Geog. Surv. Terrs. Hayden, I, No. 6, 451-473, pls. xxii-xxv.

—— 1876 B

Studies of the American Falconidæ.

Bull. U. S. Geol. Geog. Surv. Terrs. Hayden, II, No. 2, 91-182, pls. xxx, xxxi.

—— 1887 A

A manual of North American birds.

8vo., Philadelphia, 631 pages, with 124 pls., containing outline (464) drawings of generic characters.

Ridgway, R.—Continued 1901 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. I, i-xxxi+1-715 pages, 20 pls.

Describes only the Fringillidæ. Full literature.

—— 1902 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. II, i-xx+1-834 pages, 22 plates.

Describes the Tanagridæ, the Icteridæ, the Cœrebidæ, and the Mniotiltidæ.

—— 1903 A

Pycraft's classification of the Falconidæ.

Science (n.s.), XVII, 509-511.

—— 1904 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. III, i-xviii+1-801 pages.

Describes 15 families of *Oscines*, among them the Laniidæ and the Corvidæ.

—— 1907 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. IV, i-xxxii+1-973 pages, 34 pls.

—— 1911 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., L, Pt. V, i-xxiii+1-859 pages, 33 pls.

—— 1914 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. VI, i-xx+1-882 pages, 36 pls.

Describes the Picariæ, Anisodactylæ and Striges.

—— 1916 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. VII, i-xiii+1-543 pages, 24 pls.

Describes the Cuculidæ, the Psittacidæ and the Columbidæ.

—— 1919 A

The birds of North and Middle America.

Bull. U. S. Nat. Mus., No. L, Pt. VIII, i-xvi+1-852 pages, 34 pls.

Complete reference to the literature of the Charadriiformes.

Riggs, Elmer S. 1901 A

The largest known dinosaur.

Science (n.s.), XIII, 549-550.

See also Scient. Amer. Suppl., LII, 21397. Abstract in Geol. Centralbl., II, 763.

—— —— 1901 B

The dinosaur beds of the Grand River valley of Colorado.

Publ. Field Columb. Mus. Geol., I, 267-274, pls. xxxiv-xxxix.

—— 1901 C

The fore leg and pectoral girdle of Morosaurus; with a note on the genus *Camarosaurus.*

Publ. Field Columb. Mus. Geol., I, 275-281, pls. xl-xlii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 478; Rev. crit. Paléozool., VII, 14; Geol. Centralbl., II, 764; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 105.

—— —— 1903 A

Brachiosaurus altithorax, the largest known dinosaur.

Amer. Jour. Sci. (4), XV, 299-306, 7 text-figs.

Abstracts in Geol. Centralbl., III, 735; IX, 662; Rev. crit. Paléozool., VIII, 80-81.

—— —— 1903 B

The vertebral column of *Brontosaurus.*

Science (n.s.), XVII, 393-394.

—— 1903 C

Structure and relationships of opisthocœlian dinosaurs. Part I: *Apatosaurus* Marsh.

Publ. Field Columb. Mus. Geol., II, 165-196, pls. xlv-liii, 18 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 320; Geol. Centralbl., IV, 659; Rev. crit. Paléozool., VIII, 80; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 167.

—— 1904 A

Dinosaur footprints from Arizona.

Amer. Jour. Sci. (4), XVII, 423-424, 1 text-fig.

—— 1904 B

Structure and relationships of opisthocœlian dinosaurs. Part II: The Brachiosauridæ.

Field Columb. Mus. Geol., II, 229-248, pls. lxxi-lxxv, 1 text-fig.

Abstracts in Nature, LXXI, 515-516; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 131; Rev. crit. Paléozool., IX, 69-70.

Riggs, Elmer S.—Continued 1906 A

The carapace and plastron of *Basilemys sinuosus,* a new fossil tortoise from the Laramie beds of Montana.

Field Columb. Mus. Geol., II, 249-256, pls. lxxvi-lxxviii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 465; Rev. crit. Paléozool., XI, 13; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 161; Sci. Progress, I, 460.

—— 1909 A

Communications and remarks before American Society of Vertebrate Paleontologists.

Science (n.s.), XXIX, 196-198.

—— 1912 A

New or little known titanotheres from the Lower Uintah formations; with notes on the stratigraphy and distribution of fossils.

Field. Mus. Nat. Hist. Geol., IV, 17-41, pls. iv-xii, 2 text-figs.

Abstract in Geol. Centralbl., XIX, 652.

—— 1914 A

Group of twenty-six associated skeletons of *Leptomeryx* from the White River Oligocene. (Abstract.)

Bull. Geol. Soc. Amer., XXV, 145.

—— 1915 A

Skeleton of *Elephas columbi* and skeleton of *Leptomeryx evansi.*

Rep. Field. Mus. Chicago, 1914 (1915), 381, 393, pls. lx, lxviii.

——, and O. C. **Farrington** 1902 A

Dinosaur beds of the Grand River valley of Colorado.

Scient. Amer. Suppl., LIII, 22061-22062, 2 figs.

Dinosaurs are only incidentally mentioned.

Ringström, Torsten 1924 A

Nashörner der Hipparion-Fauna Nord-Chinas.

Palaeont. Sinica, ser. C, I, fasc. 4, 1-156, pls. i-xii, 92 text-figs.

The bibliography presents 107 titles.

Rio, Aurelio del 1918 A

El mamut o *Elephas primigenius.*

Bol. Direc. Estud. Biolog., II, 366-369, pls. i-vi.

Ritchie, James, and A. J. H. **Edwards** 1913 A

On the occurrence of functional teeth in the upper jaw of the sperm whale.

Proc. Roy. Soc. Edinb., XXXIII, 166-168, 3 figs.

Roberts, F. H. H. 1927 A

Ancient inhabitants of America.

Science (n.s.), LXVI, Nov. 11, Suppl., xii, xiv.

Roberts, G. E. 1863 A

On some remains of *Bothriolepis* from the Upper Devonian sandstones of Elgin.

Geologist, VI, 389-390.

See also Rep. Brit. Assoc. Adv. Sci., XXXIII, 1863, 87; Quart. Jour. Geol. Soc., XX, 1864, 198; Phil. Mag., XXVII, 545.

Robin, Charles, and Gustav **Herrmann** 1882 A

Mémoire sur la génération et la régénération de l'os des cornes caduques et persistantes des ruminants.

Jour. Anat. Physiol. Paris, XVIII, 205-265, pl. XIX.

Roche, O. 1905 B

Ueber Form und Funktion der Halswirbelsäule der Zahnwale.

Jena. Zeitschr. Naturwiss., XL, 150-252, 31 text-figs.

The bibliography presents 120 titles.

Rockwell, Alfred P. 1872 A

Discovery of the tusk of an elephant in Colorado.

Amer. Jour. Sci. (3), III, 373.

Roemer, Ferdinand 1856 B

Über die Fährten des *Sauropus primævus* im rothen Sandstein von Pottsville in Pennsylvania.

Jahresber. schles. Ges. vaterl. Kult., XXXIV, 23.

Brief remarks on Isaac Lea's paper (Lea, I., 1855 A).

Römer, Fritz 1893 A

Zur Frage nach dem Ursprunge der Schuppen der Säugetiere.

Anat. Anz., VIII, 526-532.

—— 1904 A

Die Anpassung der Wale an das Leben im Wasser.

Ber. Senckenb. naturf. Ges., 1903-1904, 77-78.

—— 1907 A

Die Abnahme der Tierarten mit der Zunahme der geographischen Breite.

Ber. Senckenb. naturf. Ges., 1907, T, 2, 63-112.

Appended is a reference to some important works on the distribution of arctic mammals.

Rörig, Adolf 1901 A

Über den gegenwärtigen Stand unserer Kenntniss der Cerviden, sowie deren Geweihentwickelung und Geweihbildung.

Ber. Senckenb. naturf. Ges., 1901, Abh., 55-78, 21 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 423-425.

—— 1902 A

Phylogenie des Cervidengeweihes.

Verh. internat. Zool.-Kongr., V, Berlin, 1901, 538-544.

—— 1905 A

Das Wachstum des Schädels von *Capreolus vulgaris, Cervus elaphus* und *Dama vulgaris.*

Anat. Anz., XXVI, 17-25.

Röse, Carl 1892 F

Ueber die Entstehung und Formabänderungen der menschlichen Molaren.

Anat. Anz., VII, 392-421, 6 figs.

—— 1892 G

Über die Zahnentwicklung der Reptilien.

Deutsche Monatsschr. Zahnheilk., X, 127-149.

—— 1893 D

Ueber die Zahnentwickelung vom *Chamæleon.*

Anat. Anz., VIII, 566-577, 8 figs.

—— 1894 C

Beiträge zur Zahnentwicklung der Schwanzmolche.

Morphol. Arbeit., IV, 178-192, 11 figs.

—— 1897 A

Ueber die verschiedenen Abänderungen der Hartgewebe bei niederen Wirbeltieren.

Anat. Anz., XIV, 21-31, 33-69, 28 figs.

See Tomes, C. S., 1898 C.

Roetter, Friedrich 1889 A

Über Entwicklung und Wachsthum der Schneidezähne bei *Mus musculus.*

Morphol. Jahrb., XV, 456-477, pl. VII.

Rogenhofer, Alois 1908 A

Über ein Endglied des Ichthyosaurierstammes aus der Kreideformation.

Verh. zool.-bot. Ges. Wien, LVIII (38-44).

Rogers, Austin F. 1924 A

Mineralogy and petrography of fossil bone.

Bull. Geol. Soc. Amer., XXXV, 535-556, pls. 26-29.

Rogers, H. D. 1842 A
See Hay, O. P., 1902 A, p. 204.
Abstract in Froriep's Notizen, XXI, 1842, cols. 20-24.

——— 1844 A
Address delivered at the meeting of the Association of American Geologists and Naturalists, held at Washington, May, 1844.
Amer. Jour. Sci. (1), XLVII, 137-160, 247-278.

——— 1858 A
The geology of Pennsylvania. A government survey. In two volumes.
Geol. Surv. Penn., I, i-xxvii+1-586 pages, 7 plates.

——— 1858 B
Organic remains and geological age [of Triassic sandstones of Pennsylvania].
Geol. Surv. Penn., II, 692-697.

Rogers, William Barton 1884 A
On the age of the coal rocks of eastern Virginia.
Rep. Assoc. Amer. Geol. Naturalists, I, II, III (1840, 1841, 1842), 298-316.
Reproduced in Emma Roger's "Reprint of Ann. Reports, etc., on the Geology of the Virginias," 1884, 645-658.

Rohon, Jos. Victor 1889 A
Ueber fossile Fische vom oberen Jenissei.
Mém. Acad. Sci. St. Pétersb. (7), XXXVI, No. 13, 1-17, pls. i, ii.

——— 1889 B
Die Dendrodonten des devonischen Systems in Russland.
Mém. Acad. Sci. St. Pétersb. (7), XXXVI, No. 14, 1-52, pls. i, ii, 1 text-fig.

——— 1891 A
Abstract in Geol. Mag. (3), IX, 232.

——— 1899 A
Die Devonischen Fische von Timan in Russland.
Sitz.-Ber. böhm. Ges. Wiss., 1899, art. VIII, 1-77, 45 text-figs.

——— 1899 B
Ueber Parietalorgane und Paraphysen.
Sitz.-Ber. böhm. Ges. Wiss., 1899, art. XXXIII, 1-15, 6 text-figs.

——— 1902 A
Beiträge zur Anatomie und Histologie der Psammosteiden.
Sitz.-Ber. böhn. Ges. Wiss., 1901, art. XVI, 1-31, pls. i, ii, 3 text-figs.

Roman, F. 1912 A
Les rhinocéridés de l'Oligocène d'Europe.
Arch. Mus. hist. nat. Lyon, XII, art. 2, 1-92, pls. i-ix, 21 text-figs.
There is a bibliography of 41 titles.

———, and L. **Joleaud** 1909 A
Le *Cadurcotherium* de l'Isle-sur-Sorgues et revision du genre *Cadurcotherium.*
Arch. Mus. hist. nat. Lyon, X, 1-52, pls. i-iii, 8 text-figs.

———. See **Mayet,** L., and F. **Roman.**

Romer, Alfred S. 1922 A
The comparison of mammalian and reptilian coracords.
Anat. Record, XXIV, 39-47, 1 fig.
The bibliography contains 7 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, II, 428.

——— 1922 B
The locomotor apparatus of certain primitive and mammal-like reptiles.
Bull. Amer. Mus. Nat. Hist., XLVI, 517-606, pls. xxvii-xlvi, 7 text-figs.
The bibliography occupies pages 601-603.

——— 1923 A
The ilium in dinosaurs and birds.
Bull. Amer. Mus. Nat. Hist., XLVIII, 141-145, 2 figs.
Abstract in Geol. Zentralbl., XXX, 444.

——— 1923 B
Crocodilian pelvic muscles and their avian and reptilian homologues.
Bull. Amer. Mus. Nat. Hist., XLVIII, 533-552, pls. xix-xxv.
In the bibliography are recorded 15 titles.

——— 1923 C
The pelvic musculature of saurischian dinosaurs.
Bull. Amer. Mus. Nat. Hist., XLVIII, 605-617, 8 figs.
Titles of 7 papers are noted in the bibliography.
Abstract in Geol. Zentralbl., XXX, 445.

——— 1924 A
Pectoral limb musculature and shoulder-girdle structure in fish and tetrapods.
Anat. Record, XXVII, 119-143, 10 figs.
The bibliography presents 10 titles.

——— 1924 B
A radial exostosis in the fossil canid *Daphœnus.*
Amer. Jour. Sci. (5), VIII, 235-240, 1 fig.

——— 1924 C
The lesser trochanter of the mammalian femur.
Anat. Record, XXVIII, 95-102, 3 figs.

Romer, Alfred S.—Continued 1925 A
An ophiacodont reptile from the Permian of Kansas.
Jour. Geol. XXXIII, 173-182, 3 figs.
Abstract in Geol. Zentralbl., XXXIII, 93.

—— 1925 B
Permian amphibian and reptilian remains described as *Stephanospondylus.*
Jour. Geol., XXXIII, 447-463, 5 figs.

—— 1926 A
Vertebrate faunal horizons in the Texas "Red beds."
Geol. Soc. Amer. Prelim. list, XXXVIII, 58-59.

—— 1926 B
A Lower Miocene horse, *Anchitherium agatensis* (Osborn).
Amer. Jour. Sci. (5), XII, 325-335, 4 figs.

—— 1927 A
Vertebrate faunal horizons in the Texas Red beds.
Bull. Geol. Soc. Amer., XXXVIII, 232 (Abstract).

—— 1928 A
Notochord in fossil vertebrates.
Amer. Jour. Sci. (5), XV, 432.

——, and J. T. **McCormack** 1928 A
A large *Palæocastor* from the Lower Miocene.
Amer. Jour. Sci. (5), XV, 58-60, 1 fig.

——, and A. H. **Sutton** 1927 A
A new arctoid carnivore from the Lower Miocene.
Amer. Jour. Sci. (5), XIV, 459-464, 2 figs.

Rosén, Nils 1913 A
Studies on the plectognaths. The air-sac, with notes on other parts of the intestines.
Arkiv Zool., VII, art. 30, 1-23, pl. i, ii, 7 text-figs.

—— 1913 B
Studies on the plectognaths.
Arkiv Zool., VIII, art. 10, 1-29, pls. i-v, 8 text-figs.

—— 1915 A
Wie wachsen die Ktenoidschuppen?
Arkiv Zool., IX, art. 20, 1-6, pl. 1, 3 text-figs.

—— 1916 A
Ueber die Homologie der Fischschuppen.
Arkiv Zool., X, art. 7, 1-36, pl. i, 13 text-figs.
The bibliography comprises 56 titles.

Rosén, Nils—Continued 1916 B
Studies on the plectognaths. 5: The skeleton.
Arkiv Zool., X, art. 8, 1-28, pls. i, ii.
There is a bibliography of 27 titles.

Rosenberg, Alexander 1873 A
Ueber die Entwicklung des Extremitäten-Skeletes bei einigen durch Reduction ihrer Gliedmassen characterisirten Wirbeltieren.
Zeitschr. wiss. Zool., XXIII, 116-169, pls. v-vii.
The bibliography includes 121 titles.

Rosenberg, E. 1887 A
Ueber das Kopfskelet einiger Selachier.
Sitz.-Ber. Naturf. Ges. Dorpat., VIII, 31-34.

—— 1895 A
Über Umformungen an den Incisiven der zweiten Zahngeneration des Menschen.
Morphol. Jahrb., XXII, 265-339, pls. viii-xi, 1 text-fig.

Rosenberg, F. T. 1911 A
Beiträge zur Entwicklungsgeschichte und Biologie der Colymbidæ.
Zeitschr. wiss. Zool., XCVII, 199-217, pl. ix, 13 text-figs.

Rosenthal, Friedrich C. 1832 A
Über die Barten des Schnabel-Walfisches (*Balæna rostrata*).
Abh. Akad. Wiss. Berlin, 1829 (1832), 127-132, pls. i-iii.

Ross, Clyde P. 1923 A
The lower Gila Region, Arizona.
U. S. Geol. Surv. Water-supp. Pap., CCCCXCVIII, 1-xiv+1-237 pages, 20 pls., 16 text-figs.

Roth, Fritz 1920 A
Über den Bau und die Entwicklung des Hautpanzers von *Gasterosteus aculeatus.*
Anat. Anz., LII, 513-534, 22 figs.
There is appended a bibliography of 18 titles.

Roth, Santiago 1903 A
Los ungulados sudamericanos.
An. Mus. La Plata (Sec. Pal.), V, 1-36, pls. i-iv.
Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 180-181.

—— 1908 A
Beitrag zur Gliederung der Sedimentablagerungen in Patagonien und der Pampasregion.
Neues Jahrb. Min. Geol. Pal., Beil. Bd., XXVI, 92-150.

Roth, Santiago—Continued 1911 A
Eine neue Gattung der Familie Megatheridæ.
Rudolf Hauthal's "Reisen in Bolivien und Peru, ausgeführt 1908."
8vo., Leipzig, Erster Anhang, 191-204, 8 figs.
Describes *Plesiomegatherium*.

Roth, Wilhelm 1911 A
Beiträge zur Kenntnis der Strukturverhältnisse des Selachier-Knorpels.
Morphol. Jahrb., XLII, 485-555, pls. v-viii, 18 text-figs.

Roule, Louis 1892 A
Les affinités zoologiques des vertébrés.
Rev. Scient. Paris, XLIX, 588-594.

Rousseau, L. F. E. 1856 A
De la dentition des cétacés et de la place qu'occupent les fanons dans la bouche des baleines.
Rev. Mag. Zool., 1856, 1-55, 8 figs.

Roux, Jean 1905 A
La famille des Ranidæ.
Zool. Anz., XXVIII, 777-785.

Rovereto, Cayetano 1912 A
Los crocodilos fósiles en las capas del Paraná.
An. Mus. Nac. Buenos Aires (3), XV, 339-369, pls. xvi-xviii, 18 text-figs.

—— 1914 A
Los estratos araucanos y sus fósiles.
An. Mus. Nac. Buenos Aires, XXV, i-iv; 1-247, pls. i-xxxi, 93 text-figs.
The bibliography comprises 60 titles.

—— 1915 A
Nuevas investigaciones sobre los delfines longirrostros del mioceno del Paraná (República Argentina).
An. Mus. Nac. Buenos Aires, XXVII, 139-151, pls. ii-iv.

Rozhdestvensky, E., and K. **Derjugin.** See **Derjugin** and **Rozhdestvensky.**

Ruedemann, R. See **Clark,** J. M., and R. **Ruedemann.**

Rudolf, G. de M. 1922 A
Correlation between habit and the architecture of the mammalian femur.
Jour. Anat. Lond., LVI, 137-146, 19 figs.
The bibliography presents 11 titles.

Rudolphi, Carl Asmund 1832 A
Über *Balæna longimana*.
Abh. Akad. Wiss. Berlin, 1829 (1832), 133-144, pls. i-v.

Rüschkamp, F. 1925 A
Ein Schädel von *Allopleuron* (*Chelone*) *hoffmanni* Gray.
Palaeont. Zeitschr., VII, 122-140, 2 pls., 1 tab., 2 text-figs.
The bibliography presents 17 titles.

Rütimeyer, L. 1862 C
Eocäne Säugethiere aus dem Gebiete des Schweizerichen Jura.
Denk. Schweiz. Ges. Naturw., XIX, art. 3, 1-98, pls. i-v.

—— 1868 A
Versuch einer natürlichen Geschichte des Rindes, in seinen Beziehungen zu den Wiederkauern im Allgemeinen. Zweite Abth.
Denk. Schweiz. Ges. Naturw., XXII, 1-175, pls. i-iv, 25 figs. in the text.

Ruge, G. 1979 A
Ueber die Entwicklung des Sternums.
Morphol. Jahrb., V, 192.

—— 1892 A
Der Verkürzungsprocess am Rumpfe von Halbaffen.
Morphol. Jahrb., XVIII, 185-325, pls. vii-x.
There is a bibliography of 35 titles.

—— 1892 B
Zeugniss für die metamere Verkürzung des Rumpfes bei Säugethieren.
Morphol. Jahrb., XIX, 376-427, pls. xiii, xiv, 11 text-figs.

—— 1906 A
Form des Brustkorbes und Lagerung der Lungen im Brustkorb beim indischen Elefanten.
Morphol. Jahrb., XXXV, 496-505, 3 figs.

Ruhwandl, Gottfried 1916 A
Die Entwicklung der Paukentasche beim Kanarienvogel (*Fringilla canaria*).
Morphol. Jahrb., L, 74-102, pls. v, vi, 17 text-figs.

—— 1916 B
Bemerkungen über die Entwicklung der Paukentasche bei der Hauskatze (*Felis domestica*).
Morphol. Jahrb., L, 101-112, pls. v, vi.

Ruschenberger, W. S. W., and G. W. **Tryon** 1879 A
Guide to the museum of the Academy of Natural Sciences of Philadelphia.
Published by the Academy, 8vo., 1-128 pages.

Rusconi, Carlos 1927 A

Sobre un humero de *Arctotherium* y otro de *Felis* de la formacion pampeana.

An. Mus. Nac. Buenos Aires, XXXIV, 279-297, 4 figs.

There is a bibliography of 12 titles.

Russell, I. C. 1884 A

A geological reconnaissance of southern Oregon.

Rep. U. S. Geol. Surv., IV, 431-464, pls. lxxxiii-lxxxv, text-figs. 6-15.

—— 1885 A

Geological History of Lake Lahontan.

Mon. U. S. Geol. Surv., XI, i-xiv+1-288 pages, pls. i-xlvi, 36 text-figs.

—— 1890 A

Notes on the surface geology of Alaska.

Bull. Geol. Soc. Amer., I, 99-162.

—— 1902 A

Geology and water resources of the Snake River plains of Idaho.

Bull. U. S. Geol. Surv., No. CXCIX, 1-192, pls. i-xxv, 6 text-figs.

——, and F. **Leverett** 1908 A

Description of the Ann Arbor quadrangle.

Folio U. S. Geol. Surv., CLV, 1-15, 3 maps, 13 text-figs.

Russell, J. W. 1924 A

Recent extinction of American mastodon.

Pan-Amer. Geologist, XLII, 235.

Russell, Loris S. 1926 A

A new species of the genus *Catopsalis* Cope from the Paskapoo formation of Alberta.

Amer. Jour. Sci. (5), XII, 230-234, fig. 1.

—— 1928 A

A new fossil fish from the Paskapoo beds of Alberta.

Amer. Jour. Sci. (5), XV, 103-107, figs. 1-4.

—— 1928 B

The genera *Kindleia* and *Stylomyleodon*.

Amer. Jour. Sci. (5), XV, 264.

Rutherford, R. L., and L. S. **Russell** 1928 A

Mammal tracks from the Paskapoo beds of Alberta.

Amer. Jour. Sci. (5), 262, 2 figs.

Rutland, Joshua 1901 A

Mammals and reptiles; or, what was the ice age?

Scient. Amer. Suppl., LI, 21032-21033.

Abstract in Geol. Centralbl., III, 79.

Rutot, A. 1875 A

Note sur l'extension de *Lamna elegans* Ag. à travers les terrains crétacé et tertiare.

Ann. Mus. hist. nat. Belgique, II, 34-41.

See page lxvi of same volume for remarks of Ch. de la Vallée-Poussin.

Rutten, Louis Marten Robert 1907 A

Ueber fossiele Trichechiden uit Zeeland en Belgie.

Versl. Wis. Nat. Afd. Akad. Wet., XV, 2 Ged., 798-811, 6 figs.

The bibliography records the titles of 34 works on the subject.

—— 1907 B

On fossil trichechids from Zeeland and Belgium.

Proc. Acad. Sci. Amsterdam, X, pt. 1, 2-14, 6 figs.

A translation into English of Rutten, L., 1907 A.

—— 1909 A

Die diluvialen Säugetiere der Niederlande.

Inaugural dissertation, Riksuniversiteit, Utrecht, i-vi+1-116 pages, 2 double plates, 2 maps.

There is on page 101 a bibliography of 15 titles.

Ryder, John A. 1879 C

Morphological notes on the limbs of the Amphiumidæ, as indicating a possible synonymy of the supposed genera.

Proc. Acad. Nat. Sci. Phila., 1879, 14-15.

—— 1882 A

A contribution to the development and morphology of the lophobranchiates: *Hippocampus antiquorum*, the sea-horse.

Bull. U. S. Fish Comm., I, 191-199, pl. xvii.

—— 1885 E

An outline of a theory of the development of the unpaired fins.

Amer. Naturalist, XIX, 90-97, 8 figs.

—— 1885 F

Development of the spines of the anterior dorsal of *Gasterosteus* and *Lophius*.

Amer. Naturalist, XIX, 415.

Ryder, John A.—Continued 1885 G
On the genesis of the extra terminal phalanges in the *Cetacea.*
Amer. Naturalist, xix, 1013-1015.

—— 1886 A
On the value of the fin-rays and their characteristics of development in the classification of the fishes, together with remarks on the theory of degeneration.
Proc. U. S. Nat. Mus., ix, 71-82.

—— 1887 A
On the homologies and early history of the limbs of vertebrates.
Proc. Acad. Nat. Sci. Phila., 1887, 344-368.

—— 1887 B
On the development of the Cetacea, together with a consideration of the probable homologies of the flukes of cetaceans and sirenians.
Rep. U. S. Fish. Comm., xiii, 427-485, pls. i-iii.

—— 1892 A
See Hay, O. P., 1902 A, page 208.
Reprinted in Ann. Mag. Nat. Hist. (6), xi, 243-248.

—— 1919 A
Restoration of *Camarasaurus.*
Proc. Amer. Philos. Soc., lviii, 390, fig. 1.
His figure published in Osborn and Mook, 1919 A.

Sabatier, Armand 1896 A
Morphologie des membres chez les poissons.
C. R. Acad. Sci. Paris, cxxii, 121-125.

—— 1897 A
Morphologie du sternum et des clavicules.
C. R. Acad. Sci. Paris, cxxiv, 805-808.

—— 1897 B
Sur la signification morphologique des os en chevron des vertébres caudales.
C. R. Acad. Sci. Paris, cxxiv, 932-935.

—— 1898 A
Morphologie des ceintures et des membres pairs et impairs des sélaciens.
C. R. Acad. Sci. Paris, cxxvii, 928-932.

—— 1902 A
Du système sternal des vertébrés.
C. R. Assoc. Anatomistes, iv, Montpelier, 99-102.

—— 1903 A
Sur les mains scapulaires et pelviennes des poissons.
C. R. Acad. Sci. Paris, cxxxvii, 893-896.

Sabatier, Armand—Continued 1903 B
Sur les mains scapulaires et pelviennes chez les poissons chondroptérygiens.
C. R. Acad. Sci. Paris, cxxxvii, 1216-1219.

—— 1904 A
Sur les mains scapulaires et pelviennes des poissons holocéphales et chez les dipneustes.
C. R. Acad. Sci. Paris, cxxxviii, 249-252.

Sachs, Marie Magdalena 1912 A
Die Weber'schen Knöchelchen bei den Cyprinoiden der schweizerischen Fauna.
Rev. suisse Zool., xx, 725-759, pls. x-xii, 6 text-figs.
There is a bibliography of 22 titles.

Safford, William Edward 1911 A
A day in the Galapagos Islands.
Science (n.s.), xxxiii, 750-751.

St. Hilaire, Geoffroy, E. F. See Geoffroy **St. Hilaire,** E. F.

St. John, Orestes 1902 A
[On the occurrence of *Dinichthys, Edestus,* and *Cochliodus* in Illinois.]
Amer. Naturalist, xxxvi, 654-659, figs. 1, 3, 4.
This title covers extracts from two letters from O. St. John to Professor Agassiz, one written in 1871, the other in 1882.

Salbey, R. 1868 A
Ueber die Structur und das Wachsthum der Fischschuppen.
Arch. Anat. Physiol. Med., 1868, 729-747, pl. xviii.
Abstracts in Arch Sci. Phys. Nat. 1869, 276-278; Ann. Mag. Nat. Hist. (4), v, 67-68.

Salensky, W. 1880 A
Beiträge zur Entwicklungsgeschichte der knorpeligen Gehörknöchelchen bei Säugethieren.
Morphol. Jahrb., vi, 414-431, pl. xx.

—— 1899 B
Sur le développement des nageoires impaires des acipensérides.
Annuaire Mus. St. Pétersb., iv, 298-324, pls. xiv-xvi.
The paper is in Russian.

—— 1903 A
Zur Phylogenie der Elephantiden.
Biol. Centralbl., xxiii, 793-803, 1 text-fig
Abstract in Jour. Roy. Micr. Soc., 1904, 55.

Salensky, W.—Continued 1903 B

Description of a mammoth: Osteology of *Elephas primigenius, E. indicus* and *E. africanus.*

Scient. Results of Exped. equipped by Imp. Acad. Sci. St. Petersb. for exhuming a mammoth found on Beresowki River. 1901, 1-124 pages, pls. i-xxv. Printed in Russian.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 187.

—— 1905 A

Ueber die Hauptresultate der Erforschung des im Jahre 1901 am Ufer der Beresowka entdeckten männlichen Mammuthcadavers.

Verh. internat. Zool.-Kongr., Berne, 1904, 67-86.

—— 1909 A

Études microscopiques de quelques organes du mammouth.

Bull. Acad. Sci. St. Pétersb. (6), III, 599-602.

This paper is written in the Russian language.

Sanson, André 1868 A

Mémoire sur la nouvelle détermination d'un type spécifique de race chevaline à cinq vertèbres lombaires.

Jour. Anat. Physiol. Paris, V, 225-268, 10 figs.

Sarkar, Sushill Ch. 1923 A

A comparative study of the buccal glands and teeth of the Opisthoglypha and a discussion on the evolution of the order from the Aglypha.

Proc. Zool. Soc. Lond., 1923, 295-322, 29 figs.

The bibliography contains 16 titles.

Saunders, Howard 1878 A

Geographical distribution of the Laridæ.

Nature, XVIII, 83.

Sauvage, H. E. 1867 A

Poissons fossiles des formations secondaires du Boulonnais.

Mém. Soc. Acad. Boulogne, II, 53-152, pls. i-iv.

—— 1872 A

De la terminaison de la colonne vértébrale chez les pleuronectes.

C. R. Acad. Sci. Paris, LXXIV, 1118-1120.

—— 1877 A

Sur les écailles de la ligne latérale chez les sciènoides.

Bull. Soc. Philomat. (7), I, 154-159.

Sauvage, H. E.—Continued 1882 A

De quelques anomalies réversibles.

Rec. Anthrop. (2), V, 103-110.

References to the literature in foot-notes.

—— 1897 A

Note sur les lépidostéidés du terrain garumnien du Portugal.

Bull. Soc. géol. France (3), XXV, 92-96, pl. ii.

—— 1899 A

Abstracts of Dean, B., 1896 A and 1897 B and of Eastman, C. R., 1898 A and 1898 B.

Rev. crit. Paléozool., III, 4.

—— 1899 B

Abstract of Eastman, C. R., 1898 C.

Rev. crit. Paléozool., III, 86 *bis.*

—— 1899 C

Abstracts of Lucas, F. E., 1898 B, 1899 A, and of Stewart, A., 1898 B, 1898 C, 1899 A, 1899 B.

Rev. crit. Paléozool., III, 148-151.

—— 1900 A

Abstract of Hay, O. P., 1899 D.

Rev. crit. Paléozool., IV, 5.

—— 1900 B

Abstract of Eastman, C. R., 1899 E.

Rev. crit. Paléozool., IV, 115-116.

—— 1901 A

Abstracts of Stewart, A., 1899 C, and 1899 D.

Rev. crit. Paléozool., V, 5, 6.

—— 1901 B

Abstracts of 8 papers of S. W. Williston.

Rev. crit. Paléozool., V, 6, 9-13.

—— 1901 C

Review of Traquair, R. H., 1899 A.

Rev. crit. Paléozool., V, 63-67.

—— 1901 D

Reviews of papers by Karpinsky (Karpinsky, A., 1899 A); Fuchs (Fuchs, T., 1900 A); and Eastman (Eastman, C. R., 1900 F).

Rev. crit. Paléozool., V, 69-70.

—— 1901 E

Review of Jaekel, O., 1899 A.

Rev. crit. Paléozool., V, 70-72.

—— 1901 F

Reviews of papers by S. W. Williston (Williston, S. W., 1899 B, 1900 A); and of A. Stewart (Stewart, A., 1899 C).

Rev. crit. Paléozool., V, 76-77.

Sauvage, H. E.—Continued 1901 G

Abstracts of papers by Whitfield (Whitfield, R. P., 1900 A); Eastman (Eastman, C. R., 1900 A); and Lucas (Lucas, F. A., 1900 F).

Rev. crit. Paléozool., v, 78, 80-81.

—— 1902 A

Les pycnodontes du Jurassique supérieur du Boulonnais.

Bull. Soc. géol. France (4), I, 543-550, pl. xii.

Abstract in Geol. Centralbl., III, 120.

—— 1902 B

Abstract of papers by Osborn (Osborn, H. F., 1899 D, 1899 E and 1899 H).

Rev. crit. Paléozool., VI, 9-13.

—— 1902 C

Abstract of Jaekel, O., 1898 B.

Rev. crit. Paléozool., VI, 180.

—— 1903 A

Complément de recensement bibliographique.

Rev. crit. Paléozool., VII, 228.

—— 1905 A

Abstract of Woodward, A. S., 1900 B.

Rev. crit. Paléozool., IX, 189.

—— 1906 A

Abstract of Hay, O. P., 1906 A.

Rev. crit. Paléozool., X, 150.

Savage, T. E. 1902 A

Geology of Henry County [Iowa].

Iowa Geol. Surv. XII, 239-302, map, text-figs. 44-55.

Presents lists of fossil sharks found in Keokuk and St. Louis limestones.

—— 1922 A

Geology and mineral resources of the Avon and Canton quadrangles.

Geol. Surv. Ill. Bull., XXXVIII, 209-271, map and text-figs.

——, and J. A. **Udden** 1922 A

The geology and mineral resources of the Edginton and Milan quadrangles.

Geol. Surv. Ill. Bull., XXXVIII, 117-208, map and text-figs.

Savin, A. C. 1922 A

Notes, observations, and list of fossils found in East Anglia, England.

Geol. Mag., LIX, 434-440.

Savornin, J. 1915 A

Les pycnodontes éocènes de l'Algérie.

C. R. Assoc. franc. Avanc. Sci., 1914, XLIII, Havre, 368-377, 5 text-figs.

Presents a list of the fossil fishes of Algeria and descriptions of 6 species of *Pycnodus*.

Schaffer, F. X. 1912 A

Zum Kapitel der fossilen Magensteine.

Mitt. Geol. Ges. Wien, V, 198-200.

Abstracts in Geol. Centralbl., XVIII, 523; Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 267.

Schapiro, B. 1913 A

Das Verhältnis der Gattung *Dipus* zu den Myomorphen: *Mus rattus* und *Meriones* auf Grund vergleichend-anatomischer Untersuchung der Muskeln der hinteren Extremitäten.

Morphol. Jahrb., XLVI, 209-291, 33 text-figs.

The bibliography occupies pages 284-291.

Scharff, R. F. 1895 A

Étude sur les Mammifères de la region holarctique, etc.

Mém. Soc. zool. France, VIII, 436-474.

There is a bibliography of 41 titles.

—— 1907 A

European animals: Their geological history and geographical distribution.

London: Constable & Co., i-xiv+1-258 pages, 70 illustrations.

Abstracts in Geol. Centralbl., X, 422-423; Geol. Mag. (5), IV, 366-371.

Review in Ann. Mag. Nat. Hist. (8), I, 207.

—— 1907 B

On the relationship of the Irish elk.

Irish Naturalist, XVI, 165-167.

—— 1909 A

On an early Tertiary land-connection between North and South America.

Amer. Naturalist, XLIII, 513-531.

Followed by a bibliography of 31 titles.

Abstract in Sci. Progress, IV, 649.

—— 1909 B

On the evidences of a former land-bridge between northern Europe and North America.

Proc. Roy. Irish Acad., XXXVIII, 1-28, 4 figs.

There is presented a bibliography of 62 titles.

Review in Geol. Mag. (5), VII, 28-37.

Scharff, R. F.—Continued 1911 A

Distribution and origin of life in America.

i-xvi+1-497 pages, 21 illustrations, 8vo.

Reviews in Amer. Naturalist, XLVI, 500-504; Science (n.s.), XXXVI, 187-198; Centralbl. Min. Geol. Pal., 1915, 633-640; 654-664; 678-688.

Ann. Mag. Nat. Hist. (8), X, 556; Nature, LXXXIX, 523. Abstract in Geol. Centralbl., XVIII, 620-621.

—— 1922 A

On the origin of the West Indian fauna.

Bijdr. Dierk. Amsterdam, XXII (Feestnum.), 65-72.

The bibliography presents 50 titles of works on the subject.

Schauinsland, H. 1899 A

Beiträge zur Biologie und Entwickelung der *Hatteria* nebst Bemerkungen über die Entwickelung der Sauropsiden.

Anat. Anz., XV, 309-334, pls. ii, iii.

—— 1903 A

Beiträge zur Entwicklungsgeschichte und Anatomie der Wirbeltiere. I-III.

Zoologica, XVI, Heft 39, 1-168, pls. i-lvi.

On pages 104 and 105 is a bibliography of 50 titles.

Reviewed in Biol. Centralbl., XXIII, 816.

—— 1906 A

Die Entwickelung der Wirbelsäule nebst Rippen und Brustbein.

Hertwig's Handb. Vergl. exper. Entwickelungsl. Wirbelt., III, pt. 2, 339-572, text-figs. 166-323.

An extensive bibliography occupies pages 562-572.

Scheel, C. 1893 A

Beiträge zur Entwicklungsgeschichte der Teleostierwirbelsäule.

Morphol. Jahrb., XX, 1-47, pls. i-iii.

The bibliography comprises 44 titles.

Schelaputin, G. 1906 A

Beiträge zur Kenntnis des Skelets der Welse. (Das Cranium von *Clarias*.)

Bull. Soc. Natural. Moscou (n.s.), XIX, 85-126, 17 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 72-74.

Schellwien, E. 1901 A

Über *Semionotus* Ag.

Schrift. Phys. ökönom. Ges. Königsb., XLII, 1-33, pls. i-iii, 6 text-figs.

Abstracts in Jahrb. Min. Geol. Pal., 1901, II, Ref., 477-478; Geol. Centralbl., II, 511; Rev. crit. Paléozool., VI, 6.

Schenk, Friedrich 1896 A

Die erste Anlage des Unterkiefers und der Zahnalveolen.

Sitz.-Ber. Akad. Wiss. Wien, CV, Abth. iii, 213-225, 1 pl.

Schiödte, J. C. 1868 A

On the development of the position of the eyes in Pleuronectidæ.

Ann. Mag. Nat. Hist. (4), I, 378-383.

Schlegel, Rudolf 1912 A

Die Extremitäten der Caniden, ihre Beziehungen zur Körpersymmetrie und die Verhältnisse ihrer relativen Proportionen.

Arch. Naturges, LXXVIII, Abt. A, Heft 11, 1-29.

The bibliography comprises 34 titles.

Schleip, Waldemar 1904 A

Die Entwickelung der Kopfknochen bei dem Lachs und der Forelle.

Anat. Hefte, Arb., XXIII, 331-427, 21 text-figs.

The bibliography comprises 28 titles.

Schlesinger, G. 1909 A

Der sagittiforme Anpassungstypus nektonischer Fische.

Verh. zool.-bot. Ges. Wien, LIX, (140-156), 7 text-figs.

—— 1909 B

Zur Phylogenie und Ethologie der Scombresociden.

Verh. zool.-bot. Ges. Wien, LIX, 302-339, 1 pl., 6 text-figs.

—— 1912 A

Studien über die Stammesgeschichte der Proboscidier.

Jahrb. geol. Reichsanst. Wien, LXII, Heft i, 87-182, pls. vi-vii.

For review and criticism see Deninger, K., 1913 A.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 351; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 213.

—— 1914 A

Bilder aus der Ahnengalerie des Pferdes.

Kosmos (Stuttgart), 1914, 210-215, 8 figs.

Abstract in Geol. Centralbl., XXI, 491.

—— 1916 A

Die Planifronsmolaren von Dobermannsdorf und Laaerberg in Niederösterreich.

Palaeont. Zeitschr., II, 215-224.

—— 1917 A

See **Schlesinger,** G. 1921 A.

Schlesinger, G.—Continued 1921 A

Die Mastodonten des naturhistorischen Staatsmuseums. Morphologisch-phylogenetische Untersuchungen.

Denk. naturh. Staatsmus., I (Geol.-pal. Reihe, i), i-xix; 1-230, pls. i-xxxvi.

The bibliography (pages xi-xix) presents 214 titles.

This treatise appears to have been issued in 1917 (Geol. Centralbl., XIV, 1918, 190). The date on the title page is 1921.

Abstract in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 339-342.

Schlosser, Max 1883 B

Ueber die Extremitaten des *Anoplotherium.*

Neues Jahrb. Min. Geol. Pal., 1883, II, 141-152, pl. vi.

There are numerous citations of the literature.

—— 1883 C

Uebersicht der bekannten Anoplotherien und Diplobunen nebst Erläuterung der Beziehungen zwischen *Anoplotherium* und anderen Säugethierfamilien.

Neues Jahrb. Min. Geol. Pal., 1883, II, 153-163, pls. vi, vii.

—— 1883 D

Ueber *Chalicotherium*-Arten.

Neues Jahrb. Min. Geol. Pal., 1883, II, 164-169.

—— 1890 D

Ueber die Modificationen des Extremitätenskelets bei den einzelnen Säugethierestämmen.

Biol. Centralbl., IX, 684-698; 716-729.

Wrongly credited to Biol. Centralb., X, in Hay, 1902 A.

—— 1897 B

Bemerkungen zu Leche's "Entwickelungsgeschichte des Zahnsystems der Säugetiere."

Anat. Anz., XIV, 17-21.

—— 1898 B

Review of H. F. Osborn and Ch. Earl's "Fossil mammals of the Puerco beds."

Neues Jahrb. Min. Geol. Pal., 1898, I, Ref., 359-372.

A review of Osborn and Earl, 1895 A. Lists of the species of the Laramie, Puerco, and Wasatch beds are given.

Schlosser, Max—Continued 1898 C

Review of H. F. Osborn and J. L. Wortman's "Perissodactyls of the Lower Miocene White River beds."

Neues Jahrb. Min. Geol. Pal., 1898, I, Ref., 372-376.

The paper reviewed is Osborn and Wortman, 1892 A.

—— 1898 D

Review of C. Röse's "Das Zahnsystem der Wirbelthiere" (Röse, C., 1895 A).

Neues Jahrb. Min. Geol. Pal., 1898; II, Ref., 118-128.

—— 1898 E

Review of Charles Earle's "Notes on the fossil Mammalia of Europe" (Earle, C., 1896 A).

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 125-128.

—— 1898 F

Review of papers by George J. Adams (Adams, G. I., 1895 A; 1896 A; 1896 B).

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 132-135.

—— 1898 G

Review of Merriam, J. C., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 136.

—— 1898 H

Abstract of Scott, W. B., 1894 D.

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 324-325.

—— 1898 I

Review of Eyerman, J., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 514-517.

—— 1898 J

Review of Scott, W. B., 1894 F.

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 517-523.

—— 1898 K

Abstract of Hay, O. P., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 524-526.

—— 1899 C

Review of Osborn, H. F., 1895 C.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 165.

—— 1899 D

Review of Scott, W. B., 1895 E.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 166.

—— 1899 E

Review of Lucas, F. A., 1895 B.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 166-167.

Schlosser, Max—Continued 1899 F

Review of Hatcher, J. B., 1895 B.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 167.

—— 1899 G

Review of Hatcher, J. B., 1895 A.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 167-168.

—— 1899 H

Review of Scott, W. B., 1894 E.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 547-552.

—— 1899 I

Review of Ameghino, F., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 345-353.

—— 1899 J

Review of Woodward, M. F., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 353-355.

—— 1899 K

Review of Woodward, M. F., 1896 B.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 355-356.

—— 1899 L

Review of W. Leche's "Untersuchungen über das Zahnsystem lebender und fossiler Halbaffen."

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 356-360.

—— 1899 M

Review of Cope, E. D., 1895 F and 1896 F.

Neues Jahrb. Min. Geol. Pal., 1899, I, Ref., 360-362.

—— 1899 N

Abstract of Cope, E. D., 1896 J.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 147.

—— 1899 O

Review of Mercer, H. C., 1897 A.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 150-151.

—— 1899 P

Abstract of Gaudry, A., 1897 A.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 313-314.

—— 1899 Q

Review of Hatcher, J. B., 1896 B.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 314-316.

—— 1899 R

Review of Farr, M. S., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 316-319.

—— 1899 S

Review of Osborn, H. F., 1896 B.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 319-324.

Schlosser, Max—Continued 1899 T

Review of Röse, C., and Bartels, M., 1896 A.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 451-455.

—— 1899 U

Reviews of Wortman, J. L., 1896 B; Wortman, J. L., 1897 B, and Marsh O. C., 1897 B.

Neues Jahrb. Min. Geol. Pal., 1899, II, Ref., 461-467.

—— 1900 B

Review of Matthew, W. D., 1897 C.

Neues Jahrb. Min. Geol. Pal., 1900, I, Ref., 299-308.

—— 1900 C

Review of Branco, W., 1897 A.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 132-135.

—— 1900 D

Review of Marsh, O. C., 1897 D.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 139-140.

—— 1900 E

Abstract of Hatcher, J. B., 1897 A.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 140.

—— 1900 F

Abstract of Schlosser, M., 1899 B.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 142-144.

—— 1900 G

Review of Adloff, P., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 306-307.

—— 1900 H

Review of Scott, W. B., 1896 B.

Neues Jahrb. Min. Geol. Pal., 1900, II, Ref., 460-463.

—— 1901 A

Review of Scott, W. B., 1895 A.

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 489-493.

—— 1901 B

Review of Osborn, H. F., 1898 I.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 300-309, 2 figs.

—— 1901 C

Review of Osborn, H. F., 1898 F.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 460-461.

—— 1901 D

Wortman, J. B., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 462-467.

—— 1901 E

Résumé of Osborn, H. F., 1897 A.

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 150.

Schlosser, Max—Continued 1901 F

Review of Leche, W., 1897 A, 1897 B.

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 299-302.

—— 1901 G

Review of Scott, W. B., 1895 A.

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 489-493.

—— 1901 H

Review of Osborn, H. F., 1898 E.

Neues Jahrb. Min. Geol. Pal., 1901, I, Ref., 499-500.

—— 1901 I

Review of Osborn, H. F., 1898 F.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 460-461.

—— 1901 J

Review of Riggs, E. S., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 469.

—— 1901 K

Abstract of Earle, C., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 467-468.

—— 1901 L

Abstracts of Stewart, A., 1899 A, 1899 B, 1899 C, 1899 D.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 479-480.

—— 1901 M

Review of Williston, S. W., 1899 B.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 479.

—— 1901 N

Review of Eastman, C. R., 1900 A.

Neues Jahrb. Min. Geol. Pal., 1901, II, Ref., 480.

—— 1902 A

Review of Wortman and Matthew, 1899 A.

Neues Jahrb. Min. Geol. Pal., 1902, I, Ref., 134-140, 4 text-figs.

—— 1902 B

Review of Scott, W. B., 1898 B.

Neues Jahrb. Min. Geol. Pal., 1902, I, Ref., 297-300.

—— 1902 C

Review of Osborn, H. F., 1898 G.

Neues Jahrb. Min. Geol. Pal., 1902, I, Ref., 300-301.

—— 1902 D

Review of Earle, C., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1902, I, Ref., 301-302.

—— 1902 E

Review of Osborn, H. F., 1898 H.

Neues Jahrb. Min. Geol. Pal., 1902, I, Ref., 472-480.

Schlosser, Max—Continued 1902 F

Review of Ameghino, F., 1899 A.

Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 134-136.

—— 1902 G

Review of Scott, W. B., 1898 A.

Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 136-140.

—— 1902 H

Review of Cope, E. D., 1889 A.

Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 140-143.

—— 1902 I

Ueber Tullberg's "System der Nagethiere nebst Bemerkungen über die fossilen Nager und die während des Tertiärs existirenden Landverbindungen."

Centralbl. Min. Geol. Pal., 1902, 705-713, 737-748.

Abstracts in Geol. Centralbl., VI, 566; VIII, 632-633; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 115-116.

—— 1902 J

Beiträge zur Kenntnis des Säugetierreste aus den süddeutschen Bohnerzen.

Geol. Pal. Abh. Jena. (N.F.), V (XII), 117-258, pls. i-v (vi-x).

Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, I, Ref., 122-129; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 108-110.

—— 1902 K

Review of Stehlin, H. G., 1899 A.

Neues Jahrb. Min. Geol. Pal., 1902, II, Ref., 463-477.

—— 1903 A

Review of Pavlow, M., 1900 A.

Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 288-292.

—— 1903 B

Review of Wortman, J. L., 1899 A.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 146-148.

—— 1903 C

Review of Osborn, H. F., 1900 H.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 554-560.

—— 1903 D

Review of Osborn, H. F., 1900 I.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 560-561.

—— 1903 E

Anthropodus oder *Neopithecus.*

Centralbl. Min. Geol. Pal., 1903, 512-513.

—— 1903 F

Review of Major, C. J. F., 1899 A.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 141-144.

Schlosser, Max—Continued 1903 G

Abstracts of Osborn, H. F., 1899 A, 1900 F, 1900 J.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 144-145.

—— 1903 H

Abstract of Lucas, F. A., 1899 A.

Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 146.

—— 1903 I

Die fossilen Säugethiere Chinas nebst einer Odontographie der recenten Antilopen.

Abh. Bayer. Akad., XXII, 1-221, pls. i-xiv, 32 text-figs.

Abstracts in Geol. Centralbl., VIII, 630-631; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 175-178.

—— 1904 A

Notizen über einige Säugethierfaunen aus dem Miocän von Württemberg und Bayern.

Neues Jahrb. Min. Geol. Pal. Beil.-Bd. XIX, 485-502, pl. xxvi.

Abstract in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 178-181.

—— 1904 B

J. L. Wortman's "Studies of Eocene Mammalia in the Marsh collection. Peabody Museum."

Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 446-459.

A synopsis of Wortman's various papers entitled as above, published in Amer. Jour. Sci., 1901, 143-155, 193-207, 281-296, 333-348, 377-383, 421-433, 437-450; 1902, 39-47, 97-114, 197-206.

—— 1904 C

Die fossilen Cavicornia von Samos.

Beitr. Pal. Geol. Oesterr.-Ung., XVII, 1904, 21-118, pls. iv-xiii, 4 text-figs.

—— 1905 A

Review of J. L. Wortman's "Studies of Eocene Mammalia in the Marsh collection, Peabody Museum." Part II: Primates.

Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 324-336.

A review of Wortman's papers published in Amer. Jour. Sci., 1903, 163-176, 339-368, 414, 419-436; 1904, 23-33, 133-140, 203-214.

—— 1905 B

Review of Osborn, H. F., 1904 A.

Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 125-126.

Schlosser, Max—Continued 1907 A

Review of four papers published by Ameghino in 1904, 1905, in Anales Mus. Nac. Buenos Aires, XI, XII, XIII.

Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 466-475.

—— 1907 B

Review of Barbour, E. H., 1905 B.

Neues Jahrb. Min. Geol. Pal., 1907, II, Ref., 485.

—— 1907 C

Beitrag zur Osteologie und systematischen Stellung der Gattung *Necrolemur*, sowie zur Stammesgeschichte der Primaten überhaupt.

Neues Jahrb. Min. Geol. Pal., 1907, Fest-Bd., 197-226, pl. x.

Abstracts in Geol. Centralbl., XI, 601-603; Sci. Progress, III, 452.

—— 1910 A

Über einige fossile Säugetiere aus dem Oligocän von Ägypten.

Zool. Anz., XXXV, 500-508.

Abstract in Sci. Progress, V, 662.

—— 1911 A

Beiträge zur Kenntnis der oligozänen Landsäugetiere aus dem Fayum, Ägypten.

Beitr. Pal. Geol. Oesterr.-Ung, XXIV, 1911, 51-167, pls. ix-xvi, 1 text-fig.

For a summary of this work see Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 132-142.

—— 1916 A

Neue Funde fossiler Säugetiere in der Eichstätter Gegend.

Abh. Bayer. Akad., XXVIII, art. 6, 1-78, 6 pls.

—— 1917 A

Zeitliche und räumliche Verbreitung und Stammesgeschichte der fossilen Fische.

Sitz.-Ber. Akad. Wiss. München, 1917, 131-150.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1919, I, Ref., 109-110; Geol. Zentralbl., XXIII, 478.

—— 1921 A

Beiträge zur Kenntnis der Säugetierreste aus dem untersten Eocaen von Reims.

Palaeontogr., LXIII, 97-136, pls. xv-xvi, 1 text-fig.

In the bibliography (pages 99-100) are recorded 16 titles.

Abstract in Rev. crit. Paléozool., XIV, 17.

Schlosser Max—Continued 1924 A

Tertiary vertebrates from Mongolia.

Palaeont. Sinica, I, fasc. 1, 1-119, pls. i-vi, 5 text-figs.

Numerous citations of the literature in foot-notes.

—— 1924 B

Über die systematische Stellung jungtertiärer Cerviden.

Centralbl. Min. Geol. Pal., 1924, 634-640.

Schmalhausen, J. J. 1907 A

Die Entwickelung des Skelettes der vorderen Extremität der anuren Amphibien.

Anat. Anz., XXXI, 177-187, 5 text-figs.

—— 1908 A

Die Entwickelung des Skelettes der hinteren Extremität der anuren Amphibien.

Anat. Anz., XXXIII, 337-344, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 121; XIV, pt. 3, 112-119.

—— 1908 B

Zur Morphologie des Säugetierfusses.

Anat. Anz., XXXIII, 373-378, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 122.

—— 1910 A

Die Entwickelung des Extremitätenskelettes von *Salamandrella kayserlingii*.

Anat. Anz., XXXVII, 431-446, 1 pl., 7 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 139-140.

—— 1912 A

Zur Morphologie der unpaaren Flossen. I: Die Entwicklung des Skelettes und der Musculatur der unpaaren Flossen der Fische.

Zeitschr. wiss. Zool., C, 509-587, pls. xv-xviii.

—— 1913 A

Zur Morphologie der unpaaren Flossen. II: Bau und Phylogenese der unpaaren Flossen und insbesonders der Schwanzflosse der Fische.

Zeitschr. wiss. Zool., CIV, 1-80, pls. i, ii, 14 text-figs.

A list of 48 papers bearing on the subject is presented on pages 77-79.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 160-162.

Schmalhausen, J. J.—Continued 1913 B

Zur Morphologie der unpaaren Flossen. III: Die Entwicklung des Skellettes der hypochordalen Caudalis von *Pristiurus* und der unpaaren Flossen von *Acipenser*.

Zeitschr. wiss. Zool., CVII, 742-759, pl. xxiii.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 167-168.

—— 1913 C

Die unpaaren Flossen der Fische und deren Phylogenese.

Mem. Soc. Natural. Kiew, XXIII, 1-256, 6 pls., 14 text-figs.

The text is in Russian; résumé in German, pages 253-256.

There are 89 titles in the bibliography.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 160-162.

—— 1916 A

On the median fin of the Dipnoi.

Rev. Zool. Russe., I, 65-74, 8 figs.

—— 1916 B

Le développement des extrémités chez les amphibiens et leur signification dans la question de l'origine des extrémités des Tétrapodes.

Rev. Zool. Russe., I, 138-147.

—— 1916 C

On the functions of the fins of fishes.

Rev. Zool. Russe., I, 207-214, 6 figs.

—— 1917 A

On the dermal bones of the shoulder-girdle of the Amphibia.

Rev. Zool. Russe., II, 102-110, figs. d-n and a plate of 15 figs.

The Russian text occupies pages 84-102 and contains the figures.

The bibliography (pages 101-102) presents 15 titles.

—— 1917 B

On the extremities of *Ranidens sibiricus* Kessl.

Rev. Zool. Russe., II, 129-131, figs. 1-5. With also a text in Russian.

—— 1923 A

Der Suspensorialapparat der Fische und das Problem der Gehörknöchelchen.

Anat. Anz., LVI, 534-543, 10 figs.

—— 1923 B

Ueber die Autostylie der Dipnoi und der Tetrapoda.

Anat. Anz., LVI, 543-550, 3 figs.

Schmid-Monnard, Carl 1883 A

Die Histogenese des Knochens der Teleostier.

Zeitschr. wiss. Zool., XXXIX, 96-136, pls. vi-ix.

Schmidt, Bruno 1913 A

Das Gebiss des *Cyclopterus lumpus* L.

Jena. Zeitschr. Naturwiss., XLIX, 313-372, pls. xv-xvii, 23 text-figs.

Appended is a bibliography of 54 titles.

Schmidt, E. 1872 A

Zur Urgeschichte Nordamerikas.

Arch. Anthropol., V, 233-259, figs. 51-60.

Schmidt, F. 1869 A

Vorläufige Mittheilungen über die wissenschaftliche Resultate der Expedition zur Aufsuchung eines angekündigten Mammutcadavers.

Bull. Acad. Sci. St. Pétersb., XIII, 97-130.

—— 1872 A

Wissenschaftliche Resultate der zur Aufsuchung eines angekündigten Mammuthcadavers von der kaiserlichen Akademie der Wissenschaften an den unteren Jenissei ausgesandten Expedition.

Mém. Acad. Sci. St. Pétersb. (7), XVIII, i-vi; 1-168, 5 plates, map and 10 text-figs.

Pages 28-36 are devoted to "Das Mammuth und seine Lagerstätte."

Schmidt, Karl P. 1927 A

New reptilian generic names.

Copeia, 1927, issue 163, 58-59.

Schmidt, Martin 1921 A

Hybodus hauffianus und die Belemnitenschlachtfelder.

Jahresh. Ver. Naturk. Württemb., LXVII, 103-107, 2 figs.

Abstract in Geol. Zentralbl., XXVII, 506.

Schmidt, O. 1886 A

The Mammalia in their relation to primeval times.

i-xxii+1-308 pages, 51 wood cuts.

Schmidt, Wilhelm Erich 1904 A

Über *Metriorhynchus jækeli* nov. sp.

Zeitschr. deutsch. geol. Ges., LVI, Monatsb., 97-108, 3 text-figs.

Schmidt, Wilhelm J. 1909 A

Beiträge zur Kenntnis der Parietalorgane der Saurier.

Zeitschr. wiss. Zool., XCII, 359-426, pl. xix, 23 text-figs.

Schmidt, W. J.—Continued 1910 A

Das Integument von *Voeltzkowia mira* Bttgr. Ein Beitrag zur Morphologie und Histologie der Eidechsenhaut.

Zeitschr. wiss. Zool., XCIV, 605-720, pls. xxii-xxiv, 24 text-figs.

Appended is a bibliography of 45 titles.

—— 1912 A

Studien am Integument der Reptilien. III: Ueber die Haut der Gerrhosauriden.

Zool. Jahrb. Anat., XXXV, 75-104, pl. iv, 13 text-figs.

—— 1912 B

Studien am Integument der Reptilien. I: Die Haut der Geckoniden.

Zeitschr. wiss. Zool., CI, 138-258, pls. viii-xii, 15 text-figs.

The bibliography furnishes 49 titles.

—— 1912 C

Studien am Integument der Reptilien. II: Die Hautverknöcherungen von Heloderma.

Zool. Jahrb. Arb. Supplem., XV (Festschr. Spengel), 219-228, pl. xiii, 3 text-figs.

—— 1914 A

Studien am Integument der Reptilien. V: Anguiden.

Zool. Jahrb. Anat., XXXVIII, 1-102, pls. i-vi, 25 text-figs.

—— 1914 B

Studien am Integument der Reptilien. VI: Über die Knochenschuppen der Crocodile.

Zool. Jahrb. Anat., XXXVIII, 643-666, pls. i-xxxix, 11 text-figs.

—— 1916 A

Ueber den dermalen Ursprung der Neuralplatten des Schildkrötencarapax.

Zool. Anz., XLVII, 9-14, 2 figs.

—— 1920 A

Über Schuppenrudimente und Hautsinnesorgane bei *Emyda granosa*.

Zool. Anz., LII, 10-20, 5 figs.

There are 7 titles in the bibliography.

Schmidtgen, O. 1911 A

Die scapula von *Halitherium schinzi* juv.

Centralbl. Min. Geol. Pal., 1911, 221-223, 1 text-fig.

Abstract in Geol. Centralbl., XVI, 713; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 175.

Schmidtgen, O.—Continued 1912 A
Neue Beiträge zur Kenntniss der hinteren Extremität von *Halitherium schinzi* Kaup.
Zool. Jahrb. Arb. Supplem., xv (Festschr. Spengel), 457-498, pl. xxix, 2 text-figs.
There is a bibliography of 10 titles.

——— 1926 A
Über *Elephas trogontherii* Pohl.
Palaeont. Zeitschr., viii, 62-68, 3 figs.
Followed in discussion by Sewertzoff, Bather, Pompeckj and Jaekel.

Schneider, Anton 1887 A
Ueber die Dipnoi und besonders die Flossen derselben.
Zool. Beitr., ii, 97-105, pl. xi, 1 text-fig.

Schöne, G. 1902 A
Vergleichende Untersuchungen über die Befestigung der Rippen an der Wirbelsäule, mit besonderer Berücksichtigung ihrer Lage zur Arteria vertebralis.
Morphol. Jahrb., xxxi, 1-43, 1 plate, 6 text-figs.
Appended is a bibliography of 28 titles.

Schönfield, G. 1911 A
Branchiosaurus tener Schönfield. Ein neuer Stegocephale aus dem Rotliegenden des nordwestlichen Sachsen.
Abh. naturw. Ges. Isis, 1911, 19-43, pls. i-iii.
There is presented a bibliography of 93 titles. Abstracts in Geol. Centralbl., xiii, 585-586; xviii, 88-89; Nature, lxxxvii, 495; Sci. Progress, vi, 580.

Schoenichen, W. 1900 A
Mundwerkzeuge im Thierreiche.
Deutche Monatschr. Zahnheilk., Jahrg., xviii, 500-510.

Schorr, Georg 1907 A
Zur Entwickelungsgeschichte des sekundären Gaumens bei einigen Säugetieren und beim Menschen.
Anat. Anz., xxx, 24-26, 1 fig.

——— 1908 A
Die Entwickelungsgeschichte des sekundären Gaumens bei einigen Säugetieren und beim Menschen.
Anat. Hefte, xxxvi, 68-106 1 pl., 19 text-figs.
There are 10 titles included in the bibliography.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 75.

Schrader, Frank C. 1915 A
Mineral deposits of the Santa Rita and Patagonia Mountains, Arizona.
Bull. U. S. Geol. Surv., dlxxxii, 1-373, pls. i-xxv, 46 text-figs.

Schreiner, K. E. 1902 A
Einige Ergebnisse über den Bau und die Entwicklung der Occipitalregion von *Amia* und *Lepidosteus*.
Zeitschr. wiss. Zool., lxxii, 467-524, pls. xxviii, xxix, 20 text-figs.

Schrenck, Leopold v. 1871 A
Bericht über neuerdings in Norden Siberiens angeblich zum Vorschein gekommene Mammuthe, nach brieflichen Mittheilungen des Hrn. Gerh. v. Maydell, nebst Bermerkungen über den Modus der Erhaltungen und die vermeinthleiche Häufigkeit ganzer Mammutleichen.
Mel. biol., vii, 718-756.

Schubert, R. J. 1902 A
Die Fischotolithen des österr.-ungar. Tertiärs. I: Die Sciaeniden.
Jahrb. geol. Reichsanst. Wien, li, 301-315, pl. x, 5 text-figs.

——— 1905 A
Die Fischotolithen des österr.-ungar. Tertiärs. II: Macruriden und Beryciden.
Jahrb. geol. Reichsanst. Wien, lv, 613-638, pls. xvi, xvii, 4 text-figs.

——— 1906 A
Die Fischotolithen des österr.-ungar. Tertiärs.
Jahrb. geol. Reichsanst. Wien, lvi, 623-706, pl. xxi, 22 text-figs.
There is a bibliography of 22 papers on otoliths of fishes.

Schuchert, Charles 1905 A
The mounted skeleton of *Triceratops prorsus* in the U. S. National Museum.
Amer. Jour. Sci. (4), xx, 458-459, pl. xv.

——— 1905 B
John Bell Hatcher.
Amer. Geologist, xxxv, 131-141, pl. xi.

——— 1910 A
Paleogeography of North America.
Bull. Geol. Soc. Amer., xx, 427-606, pls. xlvi-ci.

——— 1913 A
The dinosaurs of East Africa.
Amer. Jour. Sci. (4), xxxv, 34-38, 1 map.

——— 1914 A
Mammut americanum in Connecticut, with a note on the Farmington specimen, by Richard S. Lull.
Amer. Jour. Sci. (4), xxxvii, 321-330, 3 figs.
Abstracts in Rev. crit. Paléozool., xviii, 153; Geol. Zentralbl., xxi, 621.

Schuchert, Charles—Continued 1914 B
Climates of geologic time.
Publ. Carnegie Instn. Wash., No. 192, 266-296.

—— 1915 A
Historical geology.
Pirsson and Schuchert's *"Text-book of Geology,"* 405-830, 844-992, pls. i-xxx, xxxiv-xl, text-figs. 312-522.

—— 1918 A
On the Carboniferous of the Grand Canyon of Arizona.
Amer. Jour. Sci. (4), XLV, 347-370, figs. 1-5.

—— 1918 B
Age of the American Morrison and east African Tendaguru formations.
Bull. Geol. Soc. Amer., XXIX, 245-280; Nature, CIV, 672.

—— 1920 A
A paleontologic revival at Yale University.
Science (n.s.), LI, 80-81.

—— 1923 A
Review of the "Pleistocene of North America," etc., by Oliver P. Hay.
Amer. Jour. Sci. (5), V, 424-425.

—— 1926 A
The rise of natural history museums in the United States.
Bull. Peabody Mus. Nat. Hist., I, 1-23.

——, and Joseph **Barrell** 1914 A
A revised geologic time-table for North America.
Amer. Jour. Sci. (4), XXXVIII, 1-27, 2 text-figs.

——, and Clara M. **Levene** 1927 A
The earth and its rhythms.
8vo., i-xvi+1-410 pages, numerous illustrations.

Schulte, H. von W. 1916 A
The Sei whale (*Balænoptera borealis* Lesson).
Mem. Amer. Mus. Nat. Hist. (n.s.), I, pt. vi, 391-502, pls. xliii-lvii.

Schulthess, Betty 1920 A
Beiträge zur Kenntnis der Xenarthra auf Grund der "Santiago Roth'schen Sammlung" der zoologischen Museums der Universität Zurich.
Abh. Schweiz. pal. Ges., XLIV, art. 4, 1-119, pls. i-vi, 55 text-figs.
The bibliography contains 148 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1924, II, 454.

Schumacher, S. 1905 A
Spezielle Anatomie und Entwicklungsgeschichte des Menschen und der Wirbeltiere. IV: Skeletsystem. C. Extremitätenskelet.
Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 101-145.
Pages 101-108 are occupied by a bibliography of papers, abstracts of which follow on pages 108-145.

Schumann, Alfred 1904 A
Das Skelett der Hinterextremität von *Dipus ægypticus* (Hempr. et Ehrbg).
Morphol. Jahrb., XXXII, 233-287, pls. vii, viii.
There is a bibliography of 21 titles.

Schwalbe, G. 1904 A
Über das Gehirnrelief des Schädels bei Säugetieren.
Zeitschr. Morphol. Anthrop., VII, 203-222, pls. ii, iii, 4 text-figs.

—— 1904 B
Über die Stirnnaht bei den Primaten.
Zeitschr. Morphol. Anthrop., VII, 502-523, 3 text-figs.
References are made to the literature of the subject discussed.

—— 1910 A
Studien zur Morphologie der südamerikanischen Primatenformen.
Zeitschr. Morphol. Anthrop., XIII, 209-258, 15 text-figs.

Schwarck, W. 1872 A
Beiträge zur Entwicklung der Wirbelsäule der Vögel.
Anat. Stud., I, 569-582, pl. xxvi.

—— See also C. **Hasse,** and W. **Schwarck.**

Schwarz, Ernst 1912 A
Beitrage zur Kenntnis der Zebras.
Arch. Naturges., XXVIII, Abt. A, Heft 7, 34-57, pls. i-vi.

—— 1912 B
Die indischen Viverridæ. Beitrag zur Kenntniss der Fauna, und speziellen Tiergeographie der orientalischen Region.
Arch. Naturges., LXXVIII, Abt. A, Heft. 12, 1-30.

—— 1922 A
Notes on European fossil horses.
Jour. Mamm., III, 150-155.

—— 1922 B
Über europäische fossile Pferde und den Ursprung der Hauspferde.
Palaeont. Zeitschr., IV, 132-133.

Schwarz, Ernst—Continued 1922 C
Discussion on *Trachodon.*
Palaeont. Zeitschr., IV, 91.

—— 1924 A
On the evolution and radiation of mammalian fauna.
Acta Zool., V, 393-423.

Schwarz, H. 1908 A
Über die Morphogenie der Wirbelsäule der Tetrapoden.
Sitz.-Ber. Ges. naturf. Freunde Berlin, 1908, 315-329.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 110-113; 1910, I, Ref., 149; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 157.

—— 1908 B
Über die Wirbelsäule und die Rippen holospondyler Stegocephalen (Lepospondyli Zitt).
Beitr. Pal. Geol. Oesterr.-Ung., XXI, 1908, 63-105, 36 text-figs.
The bibliography presents 85 titles.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 269-276; Geol. Centralbl., XII, 690-692; Jahresber. Anat. Entwickl. (N.F.). XIV, pt. 3, 157.

Sclater, Philip Lutley 1858 A
On the general geographical distribution of the members of the class Aves.
Jour. Linn. Soc. Lond., II, 130-145.

—— 1866 A
On the systematic position of the pronghorn (*Antilocapra americana*).
Ann. Mag. Nat. Hist. (3), XVIII, 401-403.

—— 1875 A
The geographical distribution of mammals.
Science Lectures for the People. Manchester, 1873, 1874, 5th and 6th ser., 202-219.

—— 1879 A
Remarks on the nomenclature of the British owls, and on the arrangement of the order Striges.
Ibis (4), III, 346-351.

—— 1886 A
On the claws and spurs of birds' wings.
Ibis (5), IV, 147-151; 300-301, 4 text-figs.

—— 1897 A
On the distribution of marine mammals.
Proc. Zool. Soc. Lond., 1897, 349-359, pl. XXIV.

Sclater, Philip Lutley—Cont'd 1902 A
The generic term "*Dama.*"
Ann. Mag. Nat. Hist. (7), IX, 289-290.

Scott, Charles P. G. 1916 A
Amblystoma, not *Ambystoma.*
Science (n.s.), XLIV, 309-310.

Scott, W. B. 1895 C
Abstract in Geol. Mag. (4), I, 563.

—— 1896 C
The origin and relations of the floras and faunas of the Antartic and adjacent regions. Antarctic palæontology.
Science (n.s.), III, 307-310.

—— 1896 D
Palæontology as a morphological discipline.
Biol. Lect. Wood's Hole, 1896, 43-61.

—— 1903 A
The Edentata of the Santa Cruz beds.
Science (n.s.), XVII, 900-904.

—— 1905 A
The mammalian fauna of the Santa Cruz beds of Patagonia.
Verh. internat. Zool.-Kongr., Bern, 1904, 241-247.

—— 1905 B
Mammalia of the Santa Cruz beds.
Princeton Univ. Exped. Patagonia, V, i-xii+1-499, pls. i-lxxi, 49 text-figs.
Pages 1-106, with pls. i-xvi, were published July 15, 1903; pages 107-226, pls. xvii-xxxv, Nov. 4, 1903; pages 227-364, pls. xxxvi-lxiii, Sept. 5, 1904; pages 365-499, pls. lxiv-lxxi, July 25, 1905.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 498-503; 1906, I, Ref., 453-465; 1907, II, Ref., 320-328; Sci. Progress, V, 672.

—— 1912 A
Mammalia of the Santa Cruz beds. Pt. 3: Entelonychia.
Princeton Univ. Exped. Patagonia, VI, 238-300, pls. xii-xxx.

—— 1913 A
A history of land mammals in the western hemisphere.
Macmillan Company, New York, 8vo., i-xiv+1-693 pages, 32 plates, 304 text-figs.
Comments in Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 279-280; Sci. Progress, IX, 559; Rev. crit. Paléozool., XVIII, 97-99; Science (n.s.), XXXIX, 615-616; Nature, XCIII, 553.

—— 1914 A
On the generic name *Menodus.*
Bull. Geol. Soc. Amer., XXV, 139.

Scott, W. B.—Continued 1916 A
The isthmus of Panama in its relation to the animal life of North and South America.
Science (n.s.), XLIII, 113-124.

1917 A
The theory of evolution, with special reference to the evidence upon which it is founded.
8vo., i-vii+1-183 pages, 13 figs.

1924 A
Leidy's paleontological and geological work.
Scient. Monthly, XVIII, 433-439.

1928 A
Some applications of palæontology.
Science (n.s.), LXVII, 327-333.

Scudder, N. P. 1885 A
Certain anatomical details in the muskrat.
Proc. Biol. Soc. Wash., II, lxiv, lxv.

Scupin, H. 1896 A
Vergleichende Studien zur Histologie der Ganoidschuppen.
Arch. Naturges., LXII, 1, 145-186, pls. ix, x.
The bibliography comprises 18 titles.

Sećerov, Slavko 1911 A
Ueber die Entstehung der Diplospondylie der Selachier.
Arb. zool. Inst. Wien, XIX, 1-28, 2 pls.
The bibliography comprises 28 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 133.

Sedgwick, Adam 1894 A
On the law of development commonly known as von Baer's law; and on the significance of ancestral rudiments in embryonic development.
Quart. Jour. Micr. Sci., XXXVI, 35-52.

Seebohm, Henry 1888 A
An attempt to diagnose the suborders of the great gallino-gralline group of birds by the aid of osteological characters alone.
Ibis (5), VI, 415-435.

Seeley, Harry Govier 1865 B
On a new lizard, with ophidian affinities, from the Lower Chalk (*Saurospondylus dissimilis*).
Ann. Mag. Nat. Hist. (3), XVI, 145-148.

1866 A
Abstract in Geol. Mag. (i), III, 257.

1866 B
Outline of a theory of the skull and the skeleton.
Ann. Mag. Nat. Hist. (3), XVIII, 345-362.

Seeley, Harry Govier—Cont'd 1870 B
Review in Jour. Anat. Physiol. Lond., IV, 288-290.

1871 B
Note on some chelonian remains from the London clay.
Ann. Mag. Nat. Hist. (4), VIII, 227-233, 1 fig. in the text.
Describes the new genus *Glossochelys*.

1872 A
The origin of the vertebrate skeleton.
Ann. Mag. Nat. Hist. (4), IX, 265-280.

1872 B
The origin of the vertebrate skeleton.
Ann. Mag. Nat. Hist. (4), X, 21-45, 1 text-fig.

1874 B
On *Murænosaurus leedsii*, a plesiosaurian from the Oxford Clay.
Quart. Jour. Geol. Soc., XXX, 197-208, pl. xxi.

1874 C
On the pectoral arch and fore limb of *Ophthalmosaurus*, a new ichthyosaurian genus from the Oxford clay.
Quart. Jour. Geol. Soc., XXX, 696-707, pls. xlv, xlvi.

1874 D
On *Murænosaurus leedsii*, a plesiosaurian from the Oxford clay. Pt. I.
Quart. Jour. Geol. Soc., XXX, 197-208, pl. xxi.

1876 C
Resemblances between the bones of typical living reptiles and the bones of other animals.
Jour. Linn. Soc. Zool., XII, 155-195.

1876 D
On the occurrence of remains of a British fossil *Zeuglodon* (*Z. wanklyni*, Seeley) in the Barton Clay of the Hampshire coast.
Quart. Jour. Geol. Soc., XXXII, 428-432.

1877 A
On *Mauisaurus gardneri* (Seeley), an elasmosaurian from the base of the Gault of Folkstone.
Quart. Jour. Geol. Soc., XXXIII, 541-546, pl. xxiii.

1878 A
The evolution of the Tertiary Mammalia.
Geol. Mag. (2), V, 221-230.
A review of Gaudry, A, 1878 B.

Seeley, Harry Govier—Cont'd 1878 B

On the modifying influence of a higher form of life on a lower form.

Quart. Jour. Geol. Soc., xxxiv, 428.

Remarks based on Prof. R. Owen's paper with same title.

—— 1878 C

Remarks on affinities of mosasaurians.

Quart. Jour. Geol. Soc., xxxiv, 753.

—— 1881 A

Note on a caudal vertebra of a cetacean discovered by Prof. Judd in the Brockenhurst beds, indicative of a new type allied to *Balænoptera* (*B. juddi*).

Quart. Jour. Geol. Soc., xxxvii, 709-712, 3 figs.

—— 1882 A

On *Neusticosaurus pusillus* (Fraas), an amphibious reptile having affinities with the terrestrial Nothosauria and with the marine Plesiosauria.

Quart. Jour. Geol. Soc., xxxviii, 350-366, pl. xiii, 3 text-figs.

—— 1886 A

Review of Cope on "The Vertebrata of the Tertiary formations of the West."

Geol. Mag., n.s. (3), iii, 410-419, 465-477, 512-521, figs.

—— 1887 D

On *Parieasaurus bombidens* (Owen) and the significance of its affinities to amphibians, reptiles, and mammals.

Proc. Roy, Soc. Lond., xlii, 337-342.

—— 1887 E

Researches on the structure, organization, and classification of the fossil Reptilia. I: On *Protorosaurus speneri* (von Meyer).

Phil. Trans. Roy. Soc. Lond., clxxviii, B, 187-213, pls. xiv-xvi, 5 text-figs.

—— 1887 F

The classification of the Dinosauria.

Geol. Mag. (3), iv, 562.

—— 1887 G

On a sacrum apparently indicating a new type of bird, *Ornithodesmus cluniculus* Seeley, from the Wealden of Brook.

Quart. Jour. Geol. Soc., xliii, 206-211, 220, pl. xii.

Seeley, Harry Govier—Cont'd 1887 I

On the bone in Crocodilia which is commonly regarded as the os pubis, and its representative among the extinct Reptilia.

Proc. Roy. Soc. Lond., xliii, 235-242, 3 text-figs.

—— 1888 J

On the reputed clavicles and interclavicles of *Iguanodon*.

Rep. Brit. Assoc. Adv. Sci., lvii, Manchester, 1887, 698.

—— 1892 C

Contribution to a knowledge of the Saurischia of Europe and Africa.

Quart. Jour. Geol. Soc., xlviii, Proc., 188-190.

—— 1892 D

On the os pubis of *Polacanthus foxii*.

Quart. Jour. Geol. Soc., xlviii, 81-85, 1 fig.

—— 1893 B

Supplemental note on a double-rooted tooth from the Purbeck beds in the British Museum.

Ann. Mag. Nat. Hist. (6), xii, 274-276, 1 fig.

—— 1894 B

Researches on the structure, organization and classification of the fossil Reptilia. On the Gomphodontia.

Ann. Mag. Nat. Hist. (6), xiv, 231-234.

—— 1894 C

Researches on the structure, organization and classification of the fossil Reptilia. On the Cynodontia.

Ann. Mag. Nat. Hist. (6), xiv, 387-390.

—— 1894 D

On *Hortalosaurus skirtopodus*, a new saurischian fossil from Barkly East, Cape Colony.

Ann. Mag. Nat. Hist. (6), xvi, 411-419, 3 figs.

—— 1895 A

See Hay, O. P., 1902 A, 217.

Abstract in Ann. Mag. Nat. Hist. (6), xiii, 374-376. Seeley's paper was published in 1894.

—— 1895 D

Note on the skeleton of *Pareiasaurus*.

Geol. Mag. (4), ii, 1-3, pl. i.

Seeley, Harry Govier—Cont'd 1896 B

On the complete skeleton of an anomodont reptile (*Aristodemus rütimeyeri* Wiedersheim) from the Bunter Sandstone of Reihen, near Basel, giving new evidence of the relation of the Anomodonta to the Monotremata.

Ann. Mag. Nat. Hist. (6), xvii, 183-185.

—— 1898 B

On the skull of *Mochlorhinus platyceps*.

Ann. Mag. Nat. Hist. (7), i, 164-176, 3 figs.

—— 1899 A

On fossil reptiles from the governments of Perm and Vologda.

C. R. Congr. internat. Géol., vii, St. Pétersb., 1897, 179-182.

—— 1899 B

The origin of mammals.

Proc. internat. Zool. Congr., iv, Cambridge, 1898, 68-71.

Geol. Mag. (4), vii, 280-282.

—— 1899 C

Remarks on fossil reptiles of the Trias.

Quart. Jour. Geol. Soc., lv, 95.

—— 1901 A

Dragons of the air: An account of extinct flying reptiles.

1-240 pages, 80 illustrations, 8vo.

Reviews in Amer. Jour. Sci. 1901, xii, 396-398; Bull. Soc. belge Géol., xvi, 1902, Proc.-verb., 230-234; Neues Jahrb. Min. Geol. Pal., 1902, ii, Ref., 478-482; Nature, lxiv, 644-646; Geol. Centralbl., ii, 443.

—— 1904 A

On a pneumatic type of vertebra from the Lower Karroo rocks of Cape Colony.

Ann. Mag. Nat. Hist. (7), xiv, 336-344.

Abstract in Geol. Mag. (5), ii, 68-70.

—— 1905 A

On the primitive reptile *Procolophon*.

Proc. Zool. Soc. Lond., 1905, i, 218-230, 8 figs.

—— 1908 A

On the extremity of the tail in Ichthyosauria.

Ann. Mag. Nat. Hist. (8), i, 436-441.

Abstracts in Geol. Centralbl., xii, 151; Neues Jahrb. Min. Geol. Pal., 1910, i, Ref., 463.

Seeley, Harry Govier—Cont'd 1908 B

On the dentition of the diastema in some fossil reptiles referred to the Gomphodontia, from the Upper Karroo rocks of Cape Colony.

Ann. Mag. Nat. Hist. (8), ii, 376-382, 1 text-fig.

—— 1908 C

The armour of the extinct reptiles of the genus *Pareiasaurus*.

Proc. Zool. Soc. Lond., 1908, 605-610, text-figs. 125-129.

Abstract in Geol. Centralbl., xv, 413.

—— 1908 D

Additional evidence as to the dentition and structure of the skull in the South African fossil reptile genus *Diademodon*.

Proc. Zool. Soc. Lond., 1908, ii, 611-617, text-fig. 130.

Abstract in Sci. Progress, iii, 468.

—— 1908 E

On the interlocking of the neural arches in Ichthyosauria.

Ann. Mag. Nat. Hist. (8), i, 441-444, 2 figs.

Abstracts in Geol. Centralbl., xii, 151-152; Neues Jahrb. Min. Geol. Pal., 1910, i, Ref., 463.

—— 1909 A

On distinctions in dentition between the fossil Reptilia classed as Cynodontia and Gomphodontia.

Rep. Brit. Assoc. Adv. Sci., lxxviii, Dublin, 1908, 714.

Seemann, Georg 1926 A

Die Gliederung der Rippen bei den Reptilien.

Morphol. Jahrb., lvi, 105-135, pls. iv-v, 16 text-figs.

With a bibliography of 10 titles.

Sefve, Ivar 1910 A

Hyperhippidium, eine neue südamerikanische Pferdegattung.

Svensk. Vet. Akad. Handl., xlvi, No. 2, 1-43, pls. i-vi.

—— 1912 A

Die fossilen Pferde Südamerikas.

Svensk. Vet. Akad. Handl., xlviii, No. 6, 1-185, pls. i-iii, 32 text-figs.

The bibliography comprises 61 titles.

—— 1913 A

Über die Bezeichnungen Kowalewskys "inadaptive und adaptive Reduktion" und den von O. Abel vorgeschlagenen Ausdruck "fehlgeschlagene Anpassung."

Zool. Anz., xli, 360-368.

Sefve, Ivar—Continued 1914 A

Über eine neue Art der Gattung *Macrauchenia* aus Ulloma, Bolivien.

Bull. Geol. Instn. Upsala, XII, 205-256, pls. xiv-xviii, 10 text-figs.

—— 1915 A

Scelidotherium-reste aus Ulloma, Bolivia.

Bull. Geol. Instn. Upsala, XIII, 61-92, pls. x-xiv, 5 text-figs.

—— 1927 A

Die Hipparionen Nord-Chinas.

Palaeont. Sinica (C), IV, fasc. 2, 1-91, pls. i-vii, 30 text-figs.

The bibliography lists 61 titles.

Seitz, Adolf Leo Ludwig 1907 A

Vergleichende Studien über den mikroskopischen Knochenbau fossiler und rezenter Reptilien und dessen Bedeutung für das Wachstum und Umbildung des Knochengewebes im allgemeinen.

Nova Acta Acad. Leop.-Carol., LXXXVII, 228-371, pls. xi-xxiv.

There may be a reprint of this with its own pagination, 1-145.

Abstract in Geol. Centralbl., XII, 515-516.

Sellards, E. H. 1913 A

Origin of the hard rock phosphate deposits of Florida.

Rep. Florida Geol. Surv., V, 23-80, pls. i-ix, map.

Records and figures vertebrate fossils.

—— 1914 A

The relation between the Dunnellon formation and the Alachua clays of Florida.

Rep. Florida Geol. Surv., VI, 161-162.

—— 1915 A

A new gavial from the late Tertiary of Florida.

Amer. Jour. Sci. (4), XL, 135-138.

Describes *Tomistoma americanum* Sellards.

Abstract in Geol. Zentralbl., XXV, 467.

—— 1915 B

Chlamytherium septentrionalis, an edentate from the Pleistocene of Florida.

Amer. Jour. Sci. (4), XL, 139-145, 6 text-figs.

Abstract in Geol. Zentralbl., XXV, 271.

—— 1915 C

The value to science of the fossil animal remains found imbedded in the earth.

Rep. Florida Geol. Surv., VII, 7-9.

Sellards, E. H.—Continued 1915 D

The pebble phosphates of Florida.

Rep. Florida Geol. Surv., VII, 25-116, figures 1-52.

Abstract in Rev. crit. Paléozool., XXV, 12.

—— 1916 A

A new tortoise and a supplementary note on the gavial, *Tomistoma americana.*

Amer. Jour. Sci., XLII, 235-240, 3 text-figs.

Abstract in Geol. Zentralbl., XXV, 182.

—— 1916 B

Fossil vertebrates from Florida; A new Miocene fauna; New Pliocene-species; The Pleistocene fauna.

Rep. Florida Geol. Surv., VIII, 77-119, pls. x-xiv.

Abstract in Rev. crit. Paléozool., XXV, 10.

—— 1916 C

Human remains and associated fossils from the Pleistocene of Florida.

Rep. Florida Geol. Surv. VIII, 121-160, pls. xv-xxxi, 16 text-figs.

Abstracts in Rev. crit. Paléozool., XXV, 14; Geol. Zentralbl., XXX, 221-223.

—— 1916 D

Human remains from the Pleistocene of Florida.

Science (n.s.), XLIV, 615-617, 1 text-fig.

—— 1916 E

On the association of human remains and extinct vertebrates at Vero, Florida.

Jour. Geol., XXV, 4-24, 4 text-figs.

Reprints of this paper were distributed a few days before Jan. 1, 1917.

—— 1916 F

On the discovery of fossil human remains in Florida in association with extinct vertebrates.

Amer. Jour. Sci. (4), XLII, 1-18, 12 figs.

—— 1917 A

Further notes on human remains from Vero, Florida.

Amer. Anthrop. (n.s.), XIX, 239-251, figs. 40-44.

—— 1917 B

Note on the deposits containing human remains and artifacts at Vero, Florida.

Jour. Geol., XXV, 659-660.

—— 1917 C

Review of the evidence on which the human remains found at Vero, Florida, are referred to the Pleistocene.

Rep. Florida Geol. Surv., IX, 69-81, pls. iv, figs. 1-3; pl. v, figs. 1, 2.

Abstract in Rev. crit. Paléozool., XXV, 12.

Sellards, E. H.—Continued 1917 D

Supplement to studies in the Pleistocene at Vero, Florida.

Rep. Florida Geol. Surv., IX, 83-143.

—— 1917 E

Plants and animals associated with human remains at Vero, Florida (Abstract).

Bull. Geol. Soc. Amer., XXVIII, 197-198.

—— 1917 F

Fossil vertebrates from Florida.

Bull. Geol. Soc. Amer., XXVIII, 214 (Abstract).

—— 1918 A

The skull of a Pleistocene tapir, including description of a new species and a note on the associated fauna and flora.

Rep. Florida Geol. Surv., X, XI, 57-70, pls. i-iv.

—— 1919 A

The geology and mineral resources of Bexar County [Texas].

Bull. Univ. Texas, No. 1932, 1-202, maps and illustrations.

Selwyn, Alfred R. C. 1887 A

Summary report of the operations of the Geological Survey for the year 1886.

Rep. Geol. Surv. Canada, for 1886 A, 1-87.

Semon, Richard 1898 A

Die Entwickelung der paarigen Flossen des *Ceratodus forsteri.*

Denk. med.-naturw. Ges. Jena, IV, 5-111, pls. xi-xvii, 4 text-figs.

Forms part of Semon's "Zool. Forschungsreisen."

There is an extensive bibliography.

—— 1899 B

Weitere Beiträge zur Physiologie der Dipnoerflossen, auf Grund neuer, von Mr. Arthur Thomson, an gefangenen Exemplaren von *Ceratodus* angestellten Beobachtungen.

Zool. Anz., XXII, 294-300, 1 fig.

—— 1901 A

Über das Verwandtschaftsverhältnis der Dipnoer und Amphibien.

Zool. Anz., XXIV, 180-188.

For abstract see Neues Jahrb. Min. Geol. Pal., 1903, I, Ref., 158-159.

Semon, Richard—Continued 1901 B

Die Zahnentwickelung des *Ceratodus forsteri.*

Denk. med.-naturw. Ges. Jena, IV, 113-135, pls. xviii-xx, 12 text-figs.

Forms part of Semon's "Zool. Forschungsreisen."

The bibliography comprises 23 titles.

Sera, G. L. 1921 A

La omologia del lacrimale dei primati.

Riv. ital. Pal., XXVII, 45-49.

The bibliography notes 16 titles.

Serres, Marcel de 1835 A

On the distinctive characters of the dog, the wolf and the fox, as supplied by the skeleton.

Edinb. New Philos. Jour., XIX, 244-253.

—— 1852 A

Des causes de la plus grande taille des espèces anciennes.

Ann. Sci. nat. (3), XVII, 110-145.

—— 1852 B

Des causes de la plus grande taille des espèces fossiles aux races actuelles.

Ann. Sci. nat. (3), XVIII, 179-200.

—— 1860 A

Des espèces perdues et des races qui ont disparu des lieux qu'elles habitaient primitivement.

Ann. Sci. nat. (4), XIII, 297-306.

—— 1863 A

Note sur deux articulations ginglymoidales nouvelles existant chez le *Glyptodon.*

C. R. Acad. Sci. Paris, LVI, 885-888.

—— 1863 B

Deuxième note sur le développement de l'articulation vertébro-sternale du *Glyptodon* et les mouvements de flexion et d'extension de la tête chez cet animal fossile.

C. R. Acad. Sci. Paris, LVI, 1028-1033.

Seton, Ernest Thompson 1904 A

The master plowman of the West. A study of pocket gophers.

Cent. Mag., LXVIII (n.s. XLVI), 300-307, figs.

—— 1906 A

The wapiti and his antlers.

Scribner's Mag., XXXIX, 15-33, figs.

—— 1906 B

The moose and his antlers.

Scribner's Mag., XXXIX, 157-178, many figs.

Seton, Ernest Thompson—Cont'd 1906 C
The caribou and his kindred.
Scribner's Mag., XXXIX, 426-443, many figs.

—— 1906 D
The prong-horned antelope. The prong-buck of America (*Antilocapra americana* Ord.).
Scribner's Mag., XL, 33-49, many figs.

—— 1906 E
The whitetailed (Virginia) deer and its kin.
Scribner's Mag., XL, 321-341, many figs.

—— 1906 F
The American bison or buffalo. *Bison americanus* (Gmelin).
Scribner's Mag., XL, 385-405, many figs.

—— 1909 A
Life histories of northern animals. An account of the mammals of Manitoba.
Vol. I: Grass-eaters, i-xxx+1-673 pages, pls. i-xlvi, text-figs. 1-182, maps 1-38. Vol. II: Flesh-eaters, i-xii+674-1267 pages, pls. xlvii-c; text-figs. 183-267, maps 39-68.

Sewertzoff, A. N. 1896 A
Die Entwickelung der Occipitalregion der niederen Vertebraten im Zusammenhang mit der Frage über die Metamerie des Kopfes.
Bull. Soc. Natural. Moscou (n.s.), IX, 186-284, pls. iv, v, 4 text-figs.
There is a bibliography of 55 titles.

—— 1897 A
Beitrag zur Entwickelungsgeschichte des Wirbelthierschädels. Vorläufige Mittheilung.
Anat. Anz., XIII, 409-425, 4 figs.
There is a bibliography of 8 titles.

—— 1899 A
Studien zur Entwicklungsgeschichte des Wirbelthierkopfes. I: Die Metamerie des Kopfes des electrischen Rochen.
Bull. Soc. Natural. Moscou (n.s.), XII, 197-263; 393-455, pls. i-iv, 5 text-figs.
The bibliography comprises 39 titles.

—— 1902 A
Zur Entwickelungsgeschichte des *Ceratodus forsteri.*
Anat. Anz., XXI, 593-608, 5 figs.

—— 1904 A
Die Entwickelung der pentadaktylen Extremität der Wirbeltiere.
Anat. Anz., XXV, 472-494, 6 figs.
Abstract in Jahresber. Anat. Entwickl., Abth. 3, 113-114.

Sewertzoff, A. N.—Continued 1908 A
Studien über die Entwickelung der Muskeln, Nerven und des Skeletts der Extremitäten der niederen Tetrapoda.
Bull. Soc. Natural. Moscou (n.s.), XXI, 1-430, pls. i-vi, 34 text-figs.
The bibliography presents 90 titles.
Abstract in Nature, LXXIX, 45.

—— 1918 A
Development of gills and branchial vessels of fishes.
Rev. Zool. Russe, II, 206-208.

—— 1923 A
Die Morphologie des Visceralapparates der Elasmobranchier.
Anat. Anz., LVI, 389-410.

—— 1923 B
The place of the cartilaginous ganoids in the system and the evolution of the Osteichthyes.
Jour. Morphol., XXXVIII, 105-145, 4 figs.
The bibliography consists of 15 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1926, I, Ref., 75.

—— 1924 A
The development of the dorsal fin of *Polypterus delhesi.*
Jour. Morphol., XXXVIII, 551-580, 14 figs.

—— 1925 A
Zur Morphologie des Schädels von *Polypterus delhesi.*
Anat. Anz., LIX, 271-278, 6 figs.

—— 1926 A
Studies on the bony skull of fishes. I: Structure and development of the bony skull of *Acipenser ruthenus.*
Quart. Jour. Micr. Sci., LXX, 451-540, 40 figs.
There are 29 titles in the bibliography.

—— 1926 B
Development of the pelvic fins of *Acipenser ruthenus.* New data for the theory of the paired fins of fishes.
Jour. Morphol., XLI, 547-579, 23 figs.

—— 1926 C
Beiträge zu einer Theorie des knöchernen Schädels der Wirbeltiere.
Palaeont. Zeitschr., VIII, 42-43, 44.

—— 1926 D
Der Ursprung der Quadrupeda.
Palaeont. Zeitschr., VIII, 75-95, 24 figs.

—— 1926 E
The development of the scales of *Acipenser ruthenus.*
Jour. Morphol. Physiol., XLII, 523-560, figs. 1-38.

Sewertzoff, A. N.—Continued 1926 F

Über den Bau und die Funktion der Rippen von *Polypterus.*

Anat. Anz., LXI, 274-280, 2 figs.

——, and N. N. **Disler** 1924 A

Der Pharyngomandibulare der Selachier.

Anat. Anz., LVIII, 345-349, 3 figs.

Seydel, Otto 1899 A

Ueber Entwicklungsvorgänge an der Nasenhöhle und am Mundhöhlendache von *Echidna,* nebst Beiträgen zur Morphologie des peripheren Geruchsorgans und des Gaumens der Wirbelthiere.

Semon's "Zool. Forschungsr.," III, 445-532, pls. xv, xvi, 31 text-figs.

The bibliography comprises 90 titles.

Shaler, N. S. 1870 A

Remarks upon the change in the geographical distribution of the American buffalo.

Proc. Bost. Soc. Nat. Hist., XIII, 136.

—— 1877 A

Notes on the investigation of the Kentucky Geological Survey during the years 1873, 1874, and 1875.

Rep. Geol. Surv. Kentucky, pt. i, III, 2nd ser., 130-240.

Contains account of Big Bone Lick and its fossil vertebrates.

—— 1888 A

Habits of the great southern tortoise.

Pop. Sci. Month., XXXIV, 37-42.

——, and J. B. **Woodworth** 1899 A

Geology of the Richmond Basin, Virginia.

Rep. U. S. Geol. Surv., XIX, pt. 2, 385-519, pls. xviii-lii, text-figs. 90-116.

Shaner, Ralph F. 1926 A

The development of the skull of the turtle, with remarks on fossil reptile skulls.

Anat. Record, XXXII, 343-367, 16 figs.

The bibliography presents 18 titles.

Shann, E. W. 1919 A

The comparative myology of the shoulder girdle and pectoral fin of fishes.

Trans. Roy. Soc. Edinb., LII, 531-570, 4 pls., 1 text-fig.

The bibliography comprises 93 titles. The paper deals principally with the musculature.

Sharp, Katherine D. 1903 A

The story of the *Dinichthys.*

Amer. Invent., X, 263.

Sharpe, R. Bowdler 1891 A

A review of recent attempts to classify birds.

Internat. Ornith. Congr., II, Budapest, 1891, 1-90, 12 plates.

Shattuck, George Burbank 1904 A

Geological and geographical distribution of species of Maryland Miocene.

Maryland Geol. Surv. Miocene. Text, xciii-cxxxvii.

The list of vertebrate fossils is found on pages xciv-xcvii.

——, B. L. **Miller** and A. **Bibbins** 1907 A

Description of the Patuxent quadrangle.

Folio U. S. Geol. Surv., CLII, 1-12, 3 maps, 2 text-figs.

Shaw, D. Mackintosh 1917 A

Form and function of teeth: A theory of "maximum shear."

Jour. Anat. Lond., LII, 97-106.

Shaw, E. W., and T. E. **Savage** 1912 A

Description of the Murphysboro and Herrin [Ills.] quadrangles.

Folio U. S. Geol. Surv., CLXXXV, 1-15, 6 maps, 13 text-figs.

Shaw, James 1873 A

Geology of Ogle County [Illinois].

Geol. Surv. Ill., V, 104-123.

Sheldon, Pearl 1915 A

Mastodon tusk in glacial gravels.

Science (n.s.), XLI, 98-99.

On a supposed mastodon tusk found near Ithaca, New York.

Shepard, Edward M. 1898 A

A report on Greene County [Missouri].

Geol. Surv. Missouri, XII, pt. i, 13-245, i-iv, and maps.

Shepherd, C. E. 1910 A

Pharyngeal teeth of fishes.

Zoologist (4), XIV, 418-425, pl. ii, 2 text-figs.

—— 1910 B

Comparisons of otoliths found in fishes.

Zoologist (4), XIV, 292-298, 2 pls.

—— 1911 A

The pharyngeal teeth of fishes.

Zoologist (4), XV, 132-141, 450-456, pls. i, ii, 18 text-figs.

—— 1912 A

The pharyngeal teeth of fishes.

Zoologist (4), XVI, 201-209, 450-459, 8 figs.

Shepherd, C. E.—Continued 1913 A
The pharyngeal teeth of fishes.
Zoologist (4), XVII, 138-146, 382-389, 7 figs.

—— 1914 A
The pharyngeal teeth of fishes.
Zoologist (4), XVIII, 262-272, 3 figs.

—— 1916 A
Fossil otoliths.
Knowledge, London, XXXIX, 177-184, 203-205, figs. 151-157.
A bibliography of 10 papers is furnished.

Sherborn, S. W.
See **Woodward,** A. S. and S. W. **Sherborn.**

Shiino, Kotaro 1914 A
Das Chondrocranium von Crocodilus mit Berücksichtigung der Gehirnnerven und der Kopfgefässe.
Anat. Hefte, Arb., L, 253-382, pls. xv-xxi, 33 text-figs.
The appended bibliography comprises 46 titles.

Shimada, K. 1911 A
Über die Wirbelsäule und die Hüllen des Rückenmarks von *Cryptobranchus japonicus.*
Anat. Hefte, Arb., XLIV, 1-91, pls. i-v, 15 text-figs.
Appended is a bibliography of 48 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 136-138.

Shimek, B. 1902 A
The loess of Natchez, Miss.
Amer. Geologist, XXX, 279-299, pls. x-xvi.

—— 1904 A
Papers on the loess. The loess of Natchez, Miss.; The loess and the Lansing man; The Lansing deposit, not loess; Loess and the Iowan drift. Evidences (?) of water deposition of Loess.
Bull. Nat. Hist. Iowa, V, 298-381, pls. i-xiv.

—— 1908 A
Aftonian sands and gravels in western Iowa.
Science (n.s.), XXVIII, 923.

—— 1909 A
Aftonian sands and gravels in Iowa.
Bull. Geol. Soc. Amer., XX, 399-408, pls. xxxiii-xxxvii.
Abstract in Geol. Centralbl., XIX, 35.

—— 1910 A
Evidence that the fossiliferous gravel and sand beds of Iowa and Nebraska are Aftonian.
Bull. Geol. Soc. Amer., XXI, 119-140, pl. ii.
Abstract in Geol. Centralbl., XIX, 35.

Shimek, B.—Continued 1910 B
Geology of Harrison and Monona Counties [Iowa].
Iowa Geol. Surv., XX, 273-485, 2 maps, pls. xxi-xli.

—— 1912 A
Pleistocene of Sioux Falls, South Dakota, and vicinity.
Bull. Geol. Soc. Amer., XXIII, 125-154, pls. 7-10.

Shimer, Hervey W. 1903 A
Adaptations to aquatic, arboreal, fossorial and cursorial habits in mammals.
Amer. Naturalist, XXXVII, 819-825.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 137-138; Naturw. Wochenschr., XX (N.F. IV), 101-105.

—— 1914 A
Restoration of extinct reptiles.
Sci. Conspectus, IV, 108, 2 figs.

Shitkov, B. M. 1899 A
Über den Bau und die Entwicklung des Skelettes der freien Gliedmassen des *Isodactylium schrenkii* Strauch.
Zool. Anz., XXII, 246-257, 8 text-figs.

—, and L. L. **Sabanejew** 1909 A
Über *Ovis heinsii* Sewertz. und über den Bau der Hörner der Wildschafe.
Zool. Jahrb. Syst., XXVIII, 457-472, 11 text-figs.

Shore, Thomas W. 1887 A
On the relations of the Mammalia to the Ichthyopsida and Sauropsida.
Jour. Anat. Physiol. Lond., XXI, 362-373.

Short, Howard 1914 A
Wing adjustments of pterodactyls.
Aeronaut. Jour. London, XVIII, 336-342, 5 figs.
Followed by an editorial note.

Shufeldt, R. W. 1881 F
The claw on the index digit of the Cathartidæ.
Amer. Naturalist, XV, 906-908.

—— 1882 A
The number of bones at present known in the pectoral and pelvic limbs of birds.
Amer. Naturalist, XVI, 892-895.

—— 1882 B
Concerning some of the forms assumed by the patella in birds.
Proc. U. S. Nat. Mus., VII, 324-331, 7 text-figs.

Shufeldt, R. W.—Continued 1883 D

The habits of *Muræopsis tridactylus* in captivity; with observations on its anatomy.

Science (o.s.), II, 159-163, 4 figs.

—— 1884 B

Osteology of the large-mouthed black bass *(Micropterus salmoides)*.

Sci. (o.s.), III, 532, 749, fig.

—— 1885 C

A complete fibula in an adult living carinate bird.

Science (o.s.), V, 516, 1 text-fig.

—— 1886 D

Feathered forms of other days.

Cent. Mag., IX, 352-365, 11 figs.

Reviewed in Amer. Naturalist, XXXVII, 1908, 34.

—— 1887 A

A critical comparison of a series of skulls of the wild and domesticated turkeys.

Jour. Comp. Med. Surg., VIII, 207-222, 7 figs.

—— 1889 D

Remarks upon the extinct mammals of the United States.

1-38 pages, 12 figs.

Reprinted from the American Field, XXXII, 1889, Nos. 17-22.

—— 1890 D

Contributions to the study of *Heloderma suspectum*.

Proc. Zool. Soc. Lond., 1890, 148-214, pls. xvi-xviii.

The bibliography occupies pages 235-243, 64 titles.

—— 1891 D

On the question of saurognathism of the Pici and other osteological notes upon that group.

Proc. Zool. Soc. Lond., 1891, 122-129.

—— 1891 E

On the comparative osteology of the United States Columbidæ.

Ibis (6), VI, 194-196.

—— 1893 B

On the mechanism of the upper mandible in the Scolopacidæ.

Ibis (6), V, 563-565, 1 text-fig.

—— 1893 C

Notes on palæopathology.

Pop. Sci. Month., XLII, 679-684, 2 text-figs.

—— 1893 D

On the classification of the Longipennes.

Amer. Naturalist, XXVII, 233-237.

Shufeldt, R. W.—Continued 1893 E

Notes on palæopathology.

Pop. Sci. Month., XLII, 679-684, 2 figs.

—— 1895 A

On the osteology of certain cranes, rails, and their allies, with remarks upon their affinities.

Jour. Anat. Physiol. Lond., XXIX (n.s. IX), 21-34, 3 figs.

—— 1896 A

Progress in American ornithology.

Amer. Naturalist, XXX, 357-372.

A review of The A. O. U. Check-list of North American birds.

—— 1900 B

On the osteology of the Striges.

Proc. Amer. Philos. Soc., XXXIX, 665-722, pls. x-xvii, 6 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 435.

—— 1900 C

On the osteology of the woodpeckers.

Proc. Amer. Philos. Soc., XXXIX, 578-622, pl. ix, 11 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 434-435.

—— 1900 D

Professor Collett on the morphology of the cranium and the auricular openings in the North-European species of the family Strigidæ.

Jour. Morphol., XVII, 119-176, pls. xv-xx, 7 text-figs.

—— 1901 A

Osteology of the Herodiones.

Ann. Carnegie Mus., I, 158-249, pls. v, vi, 43 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 437.

—— 1901 B

Osteology of the flamingoes.

Ann. Carnegie. Mus., I, 295-324, pls. ix-xiv.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 438.

—— 1901 C

Osteology of the cuckoos.

Proc. Amer. Philos. Soc., XL, 4-51, pls. i, ii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 436.

—— 1901 D

On the osteology of the pigeons (Columbæ).

Jour. Morphol., XVII, 487-511, pls. A. B., 4 text-figs.

Shufeldt, R. W.—Continued 1901 E
The skeleton of the black bass.
Bull. U. S. Fish Comm., XIX (1899), 1901, 311-320, pl. xliv, 8 text-figs.

——— 1902 A
The osteology of the Steganopodes.
Mem. Carnegie Mus., I, 109-223, pls. xxi-xxx, 37 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 436-437.

——— 1903 A
Osteology of the Limicolæ.
Ann. Carnegie Mus., II, 15-70, pl. i, 27 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 438.

——— 1903 B
On the classification of certain groups of birds. (Supersuborders: Archornithiformes; Dromæognathæ; Odontoholcæ.)
Amer. Naturalist, XXXVII, 33-64, 2 text-figs.

——— 1904 A
On the osteology and systematic position of the Pygopodes.
Amer. Naturalist, XXXVIII, 13-49, pl. i, 2 text-figs.

——— 1904 B
An arrangement of the families and the higher groups of birds.
Amer. Naturalist, XXXVIII, 833-857, 6 text-figs.

——— 1904 C
Comparison of the provisional schemes of the classification of birds.
Amer. Naturalist, XXXVIII, 311-319.

——— 1907 A
On the osteology of the Tubinares.
Amer. Naturalist, XLI, 109-124, 2 text-figs.

——— 1907 B
The flight of *Archæopteryx*.
Discovery, New York, I, 114.

——— 1909 A
Osteology of birds.
1: Osteology of the Accipitres. Page 5.
2: Osteology of the Gallinæ. Page 169.
3: Osteology and classfication of the Anseres. Page 249.
Bull. N. Y. State Mus., No. CXXX, 1-381, 26 plates, 145 text-figs.

——— 1911 A
An arrangement of the families and the higher groups of the Mammalia.
Nyt Mag. Naturv., XLIX, 65-80.

Shufeldt, R. W.—Continued 1913 A
Contributions to avian paleontology.
Auk, XXX, 29-39, pl. iii.

——— 1913 B
Review of the fossil fauna of the desert region of Oregon, with a description of additional material collected there.
Bull. Amer. Mus. Nat. Hist., XXXII, 123-178, pls. ix-xliii.
Abstracts in Rev. crit. Paléozool., XXI, 48; Geol. Zentralbl., XXI, 622.

——— 1913 C
Further studies of fossil birds, with descriptions of new and extinct species.
Bull. Amer. Mus. Nat. Hist., XXXII, 285-306, pls. li-lix.
Paper announced in Science (n.s.), 306, with list of species, but no descriptions.
Abstracts in Sci. Progress, VIII, 638; Rev. crit. Paléozool., XXI, 48; Geol. Zentralbl., XXI, 238.

——— 1913 D
Fossil feathers and some heretofore undescribed fossil birds.
Jour. Geol., XXI, 628-652, 12 text-figs.
Abstracts in Geol. Centralbl., XX, 704; Sci. Progress, VIII, 638.

——— 1913 E
On the patella in the Phalacrocoracidæ.
Proc. Zool. Soc. Lond., 1913, 393-402, pl. lxi.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 169.

——— 1913 F
New and extinct birds and other species from the Pleistocene of Oregon.
Science (n.s.), XXXVII, 306-307.
Presents a list of 25 species.

——— 1913 G
Extinct ostrich birds of the United States.
Aquila, XX, 411-422, pls. i-v. In Hungarian and English.

——— 1913 H
The wild turkey and its hunting.
The Illustrated Outdoor World and Recreation, New York, XLVIII, 94-98; 146-147, 34 figs.
Articles written by R. W. Shufeldt for Edward A. McIlhenney, in part; in part by McIlhenney himself.

——— 1914 A
The biggest bird that ever lived.
Scient. Amer., CX, 245-246, 329, fig. on cover.

Shufeldt, R. W.—Continued 1914 B

On the skeleton of the ocellated turkey *(Agriocharis ocellata)* with notes on the osteology of other Meleagridæ.

Aquila, XXI, 1-52, 14 pls.
Printed in Hungarian and English.
Citations of the literature are in footnotes.

—— 1914 C

Contribution to the study of the "treeducks" of the genus *Dendrocygna*.

Zool. Jahrb. Syst., XXXVIII, 1-70, pls. i-xvi.

—— 1915 A

On a restoration of the base of the cranium of *Hesperornis regalis*.

Bull. Amer. Pal., V, 73-85 (1-13 of reprint), pls. i, ii.
For brief note on see Aquila, XXII (1915), 400.

—— 1915 B

A critical study of the fossil bird *Gallinuloides wyomingensis* Eastman.

Jour. Geol., XXXIII, 619-634, 2 text-figs.
For abstract see Aquila, XXII (1915), 399.

—— 1915 C

Comparative osteology of certain rails and cranes, and the systematic positions of the supersuborders Gruiformes and Ralliformes.

Anat. Record, IX, October, 1915, 731-750, 9 text-figs.

—— 1915 D

Fossil birds in the Marsh collection of Yale University.

Trans. Conn. Acad. Arts Sci., XIX, 1-110, pls. i-xv.
Abstracts in Aquila, XXII (1915), 398-399; Rev. crit. Paléozool., XX, 89.

—— 1915 E

On the taxonomy of the Procyonidæ.

Science (n.s.), XLI, 691-692.

—— 1915 F

The fossil remains of a species of *Hesperornis* found in Montana.

Auk, XXXII, 290-294, pl. xviii.
For brief note on this paper see Aquila, XXII (1915), 400.

—— 1915 G

Fossil remains of the extinct cormorant *Phalacrocorax macropus* found in Montana.

Auk, XXXII, 485-488.

Shufeldt, R. W.—Continued 1916 A

Gilmore's restoration of *Ceratosaurus nasicornis*.

Scient. Amer. Suppl., No. 2098, 187, 1 text-fig.

—— 1916 B

Monster extinct reptiles. Some recent restorations at the National Museum.

Scient. Amer. Suppl., No. 2089, 40-42, 7 text-figs.

—— 1916 C

New extinct bird from South Carolina.

Geol. Mag., III, 343-347, pl. xv.
Abstracts in Geol. Zentralbl., XXIII, 445; XXVI, 379.

—— 1916 D

Fossil birds' eggs.

Emu, XVI, 80-91, pls. xxi-xxv.

—— 1916 E

Report on fossil birds from Vero, Florida.

Jour. Geol., XXV, 18-19.
Reprints of this paper were distributed a few days before Jan. 1, 1917. Reviewed in Auk, XXXIV, 357.

—— 1916 F

The restoration of *Podokesaurus holyokensis*.

Jour. Wash. Acad. Sci., VI, 258-259.

—— 1917 A

Observations on the osteology of the porcupine fish *(Diodon hystrix)*.

Anat. Record, XI, 1-3.

—— 1917 B

Fossil birds found at Vero, Florida.

Rep. Florida Geol. Surv., IX, 35-42, pls. i, ii, text-figs. 1-25.
Abstract in Rev. crit. Paléozool., XXV, 15.

—— 1917 C

On the Government collection of fossil fishes.

Aquarium Bull., Nov. 1917, 49-51, a text-figure of *Priscacara dartoni*.
Included is a list, probably not wholly complete, of the fossil fishes in the U. S. National Museum.

—— 1917 D

Fossil remains of what appears to be a passerine bird from the Florissant shales of Colorado.

Proc. U. S. Nat. Mus., LIII, 453-455, pls. lx, lxi.
Described remains of a wholly indeterminable bird.

Shufeldt, R. W.—Continued 1918 A

Notes on some bird fossils from Florida.

Auk, xxxv, 357-358.

—— 1920 A

Baker on the birds of the Pleistocene.

Auk, xxxvii, 634-635.

—— 1921 A

Observations on the cervical region of the spine in chelonians.

Jour. Morphol., xxxv, 213-223, pls. i, ii.

—— 1922 A

Remarkable changes in the skull of an American badger *(Taxidea taxus)* due to age.

Jour. Mamm., iii, 173-175, pl. x.

—— 1924 A

The skull of the wolverine *(Gulo luscus)*.

Jour. Mamm., v, 189-193, pls. xxi, xxii.

Shuler, Ellis W. 1917 A

Dinosaur tracks in the Glen Rose limestone, near Glen Rose, Texas.

Amer. Jour. Sci. (4), xliv, 294-298, 3 figs. Abstract in Geol. Zentralbl., xxv, 505.

—— 1923 A

Occurrence of human remains with Pleistocene fossils, Lagow sand pit, Dallas, Texas.

Science (n.s.), lvii, 333-334.

Shumard, B. F. 1855 A

Description of a geological section, on the Mississippi River, from St. Louis to Commerce.

Geol. Surv. of Missouri, i, ii, by G. C. Swallow, pt. ii, 139-184.

—— 1863 A

Discovery in Texas of dicotyledonous leaves in Cretaceous strata and the existence of an extensive Miocene formation.

Trans. Acad. Sci. St. Louis, ii, 140-141.

—— 1873 A

S'te Genevieve and Jefferson Counties [Missouri].

Geol. Surv. Missouri, 1855-1871. Ralph Pumpelly, director. 290-313, maps.

Sicher, Harry 1916 A

Die Entwicklung des Gebisses von *Talpa europæa*.

Anat. Hefte, Arb., liv, 31-112, pls. iii-vi, 20 text-figs.

The bibliography cites 13 papers.

Siebenrock, F. 1892 B

Ueber Wirbelassimilation bei den Sauriern.

Ann. naturh. Hofmus. Wien, vii, 373-378, 2 figs.

—— 1900 A

Der Zungenbeinapparat und Kehlkopf sammt Luftröhre von *Testudo calcarata* Schneid.

Sitz.-Ber. Akad. Wiss. Wien, cix, Abth. i, 441-448, 1 plate.

—— 1901 A

Ueber die Verbindungsweise des Schultergürtels mit dem Schädel bei den Teleosteern.

Ann. naturh. Hofmus. Wien, xvi, 105-141, pls. iv-vi.

The bibliography comprises 73 titles.

—— 1902 A

Zur Systematik der Schildkrötenfamilie Trionychidæ Bell, nebst Beschreibung einer neuen *Cyclanorbis*-Art.

Sitz.-Ber. Akad. Wiss. Wien, xci, 807-846, 18 figures in the text.

Plastra of all the species are figured.

—— 1906 A

Ergebnisse einer zoologischen Forschungsreise von Dr. Franz Werner nach Ägypten und im ägyptischen Sudan, iv, Krokodile und Schildkröten.

Sitz.-Ber. Akad. Wiss. Wien, cxv, Heft 6, 817-839, 8 figs.

—— 1907 A

Die Schildkrötenfamilie Cinosternidæ. Monographisch bearbeitet.

Sitz.-Ber. Akad. Wiss. Wien, cxvi, Abth. 1, 527-599, pls. i, ii, 2 maps, 8 text-figs.

—— 1909 A

Synopsis der rezenten Schildkröten, mit Berücksichtigung der in historischer Zeit ausgestorbenen Arten.

Zool. Jahrb., Suppl., x, 427-618.

—— 1919 A

Emydura macquarrii Gray und der systematische Wert des Nuchalschildes bei den Schildkröten.

Zool. Anz., l, 273-277.

—— 1923 A

Die nearktischen Trionychidæ.

Verh. zool.-bot. Ges. Wien, lxxiii, 180-194.

Sieglbauer, Felix 1909 A

Zur Anatomie der Schildkröten-extremität.

Arch. Anat. Physiol. Leipzig., 183-280, pls. vii-x, 4 text-figs.

Appended is a bibliography of 42 titles.

The paper deals almost wholly with the muscles and nerves.

—— 1911 A

Zur Entwicklung der Vogelextremität.

Zeitschr. wiss. Zool., XCVII, 262-313, pls. xiii, xiv, 16 text-figs.

This paper is followed by a list of 30 works on the subject.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 176.

Silliman, B., Sr. 1831 A

Remarks on Cooper, Smith and Dekay's report.

Amer. Jour. Sci. (1), XX, 371-372.

Silliman, B. 1855 A

On the subject of petrifaction.

Warren's *Monograph on Mastodon*, ed. 2, 221-222.

Simoens, G. 1902 A

Note sur *Helicoprion bessonowi* (Karpinsky).

Bull. Soc. belge Géol. (2), XIII, Pr. verb., 235-243, 6 figs.

Simpson, George Gaylord 1924 A

The American triconodonts.

Geol. Soc. Amer. Prelim. lists, 1924, 39.

—— 1925 A

American triconodonts.

Bull. Geol. Soc. Amer., XXXVI, 229 (Abstract).

—— 1925 B

Mesozoic Mammalia. I: American triconodonts. II: *Tinodon* and its allies. III: Preliminary comparison of Jurassic mammals, except multituberculates.

Amer. Jour. Sci. (5), X, 145-165, 332-358, 451-470, 559-569, 40 figs.

On page 358 is a bibliography of 30 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1926, 90-94.

—— 1925 C

A Mesozoic mammal skull from Mongolia.

Amer. Mus. Novit., CCI, 1-11, 7 figs.

—— 1925 D

Review of Johan Kiaer on "The Downtonian Fauna of Norway. I: *Anaspida*, etc."

Science (n.s.), LXII, 288-289.

Simpson, George G.—Cont'd 1926 A

Are *Dromatherium* and *Microconodon* mammals?

Science (n.s.), LXIII, 548-549.

—— 1926 B

Pre-Cretaceous evolution of mammalian lower molars.

Bull. Geol. Soc. Amer., XXXVII, 238 (Abstract).

—— 1926 C

New reconstruction of *Lasanius*.

Bull. Geol. Soc. Amer., XXXVII, 397-402, 1 fig.

—— 1926 D

Mesozoic Mammalia. IV: The multituberculates as living animals.

Amer. Jour. Sci. (5), XI, 228-250, 8 figs.

—— 1926 E

The fauna of Quarry 9.

Amer. Jour. Sci. (5), XII, 1-11, 1 fig.

—— 1926 F

American terrestrial Rhynchocephalia.

Amer. Jour. Sci. (5), XII, 12-16, 2 figs.

—— 1926 G

Mesozoic Mammalia. V: *Dromatherium* and *Microconodon*.

Amer. Jour. Sci. (5), XII, 87-108.

—— 1926 H

The age of the Morrison formation.

Amer. Jour. Sci. (5), XII, 196-216.

The bibliography presents 23 titles.

—— 1926 I

Review of G. Heilmann's *Origin of Birds*.

Amer. Jour. Sci. (5), XI, 453-454.

—— 1926 J

Review of F. von Huene's *The carnivorous dinosaurs in the Jura and Cretaceous formations, principally in Europe*.

Amer. Jour. Sci. (5), XII, 458.

—— 1926 K

Review of David Black's *Asia and the dispersal of the Primates*.

Amer. Jour. Sci. (5), XV, 459.

—— 1927 A

Mammalian fauna of the Hell Creek formation of Montana.

Amer. Mus. Novit., CCLXVII, 1-7, 6 figs.

—— 1927 B

Mammalian fauna and correlation of the Paskapoo formation of Alberta.

Amer. Mus. Novit., CCLXVIII, 1-10.

Simpson, George G.—Cont'd 1927 C

Mesozoic Mammalia. VI: Genera of Morrison pantotheres.

Amer. Jour. Sci. (5), XIII, 409-416.

—— 1927 D

Mesozoic Mammalia. VII: Taxonomy of Morrison multituberculates.

Amer. Jour. Sci. (5), XIV, 36-38.

—— 1927 E

Tathiodon, new genus, to replace *Tanaodon* Simpson non Kirk.

Amer. Jour. Sci. (5), XIV, 71.

—— 1927 F

Mesozoic Mammalia. VIII: Genera of Lance mammals other than multituberculates.

Amer. Jour. Sci. (5), XIV, 121-130.

—— 1927 G

Mesozoic Mammalia. IX: The brain of Jurassic mammals.

Amer. Jour. Sci. (5), XIV, 259-268, 4 figs.

—— 1928 A

A new mammalian fauna from the Fort Union of southern Montana.

Amer. Mus. Novit., CCXCVII, 1-15, 14 figs.

—— 1928 B

Mesozoic Mammalia. XI: *Brancatherium tendagurense* Dietrich.

Amer. Jour. Sci. (5), XV, 303-308, 2 figs.

—— See also **Gregory** and **Simpson.**

Sinclair, W. J. 1901 A

The discovery of a new fossil tapir in Oregon.

Jour. Geol., IX, 702-707, 1 text-fig.

Abstract in Geol. Centralbl., II, 762.

—— 1903 A

A preliminary account of the exploration of the Potter Creek Cave, Shasta County, California.

Science (n.s.), XVII, 708-712.

Abstracts in Geol. Centralbl., IX, 639; Neues Jahrb. Min. Geol. Pal., 1904, II, Ref., 291.

—— 1903 B

A new tortoise from the auriferous gravels of California.

Bull. Dept. Geol. Univ. Calif., III, 243-248, two figures.

Abstract in Geol. Centralbl., V, 377.

—— 1903 C

Mylagaulodon, a new rodent from the Upper John Day of Oregon.

Amer. Jour. Sci. (4), XV, 143-144, 1 text-fig.

Abstract in Geol. Centralbl., V, 39.

Sinclair, W. J.—Continued 1904 A

The exploration of the Potter Creek Cave.

Univ. of Calif. Publ. Amer. Arch. Ethn., II, 1-27, pls. i-xiv.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1906, I, Ref., 125-127; Geol. Centralbl., VII, 617-618; Nature, LXXI, 472.

Condensed reprint in Records of the Past, III, 1904, 275-282, figures.

—— 1904 B

Note on fossils found in region of Main Walker River, Nevada.

Bull. Dept. Geol. Univ. Calif., IV, 10-11.

—— 1905 A

New or imperfectly known rodents and ungulates from the John Day series.

Bull. Dept. Geol. Univ. Calif., IV, 125-143, pls. xiv, xviii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 303-305; Geol. Centralbl., VIII, 374; Rev. crit. Paléozool., X, 199.

—— 1905 B

New Mammalia from the Quaternary caves of California.

Bull. Dept. Geol. Univ. Calif., IV, 145-161, pls. xix, xxiii.

Abstract in Geol. Centralbl., VIII, 372; Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 298-299.

—— 1905 C

The marsupial fauna of the Santa Cruz beds.

Proc. Amer. Philos. Soc., XLIV, 73-81, pls. i, ii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, 306-309.

—— 1905 D

Mammalia of the Santa Cruz beds: Edentata, Insectivora, Glires.

Princeton Univ. Exped. Patagonia, 1896-1899, V, i-xi; 1-499, pls. i-lxxi, 49 text-figs.

Pages 1-106, pls. i-xvi, were published July 15, 1903; pages 107-226, pls. xvii-xxxv, Nov. 4, 1903; pages 227-364, pls. xxxvi-lxiii, Sept. 5, 1904; pages 365-499, pls. lxiv-lxxi, July 25, 1905. The bibliography is to be found on pages 487-489.

Reviewed in Nature, LXXV, 498-499.

Abstract in Sci. Progress, I, 449.

—— 1906 A

Some edentate-like remains from the Mascall beds of Oregon.

Bull. Dept. Geol. Univ. Calif., V, 65-66, 3 text-figs.

Abstract in Geol. Centralbl., XII, 387.

Sinclair, W. J.—Continued 1906 B

Mammalia of the Santa Cruz beds: Marsupialia.

Princeton Univ. Exped. Patagonia, 1886-1899, IV, pt. 3, 333-460, pls. xl-lxv, 9 text-figs.

The extensive bibliography occupies pages 325-332.

Reviewed in Nature, LXXV, 498.

—— 1908 A

Recent investigations bearing on the question of the occurrence of Neocene man in the auriferous gravels of the Sierra Nevada.

Univ. Calif. Publ. Amer. Arch. Ethn., VII, 107-131, pls. xiii, xiv.

Abstract in Geol. Centralbl., XII, 217.

—— 1910 A

Dermal bones of *Paramylodon* from the asphaltum deposits of Rancho La Brea, near Los Angeles, California.

Proc. Amer. Philos. Soc., XLIX, 191-195, 1 text-fig.

Abstracts in Nature, LXXXIII, 505; Sci. Progress, V, 674.

—— 1910 B

The restored skeleton of *Leptauchenia decora*.

Proc. Amer. Philos. Soc., XLIX, 196-199, 1 text-fig.

Abstracts in Geol. Centralbl., XV, 650; Sci. Progress, V, 670.

—— 1912 A

Symposium on ten years progress in vertebrate paleontology. Contributions to geologic theory and method by American workers in vertebrate paleontology.

Bull. Geol. Soc. Amer., XXIII, 262-266.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, and Williston.

—— 1914 A

A revision of the bunodont Artiodactyla of the Middle and Lower Eocene of North America.

Bull. Amer. Mus. Nat. Hist., XXXIII, 267-295, 28 text-figs.

Abstracts in Rev. crit. Paléozool., XXI, 53; Geol. Zentralbl., XXVII, 222.

—— 1915 A

Additions to the fauna of the Lower Pliocene Snake Creek beds (Results of the Princeton University 1914 expedition to Nebraska).

Proc. Amer. Philos. Soc., LIV, 73-95, 18 text-figs.

Abstract in Science (n.s.), XLI, 839-840.

Sinclair, W. J.—Continued 1917 A

A new labyrinthodont from the Triassic of Pennsylvania.

Amer. Jour. Sci. (4), XLIII, 319-321, 1 text-fig.

Brief abstracts in Bull. Geol. Soc. Amer., XXVIII, 212; Geol. Zentralbl., XXV, 44.

—— 1918 A

A large parasuchian from the Triassic of Pennsylvania.

Amer. Jour. Sci. (4), XLV, 457-462, text-figs. 1-10.

Abstract in Geol. Zentralbl., XXV, 43.

—— 1921 A

The "turtle-Oreodon" layer, or "red layer." A contribution to the stratigraphy of the White River Oligocene.

Proc. Amer. Philos. Soc., LX, 457-466, pl. VII.

—— 1921 B

A new *Hoplophoneus* from the Titanotherium beds.

Proc. Amer. Philos. Soc., LX, 96-98, fig. 1.

Abstract in Rev. crit. Paléozool., XXVII, 212.

—— 1921 C

Entelodonts from the big Badlands of South Dakota in the Geological Museum of Princeton University.

Proc. Amer. Philos. Soc., LX, 467-495, 22 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1923, I, 319.

—— 1922 A

Hyracodons from the Big Badlands of South Dakota. The small entelodonts of the White River Oligocene.

Science (n.s.), LV, 654 (Abstract).

Abstract in Rev. crit. Paléozool., XXVII, 212.

—— 1922 B

The small entelodonts of the White River Oligocene.

Proc. Amer. Philos. Soc., LXI, 53-64, 5 figs.

Abstract in Rev. crit. Paléozool., XXVII, 211.

—— 1922 C

Hyracodons from the Big Badlands of South Dakota.

Proc. Amer. Philos. Soc., LXI, 65-79, 8 figs.

—— 1924 A

The faunas of the concretionary zones of the Oreodon beds, White River Oligocene.

Proc. Amer. Philos. Soc., LXIII, 93-133, 10 figs.

Sinclair, W. J.—Continued 1925 A

The mounted skeleton of a new *Mesohippus* from the Protoceras beds.

Proc. Amer. Philos. Soc., LXIV, 55-63, pl. iii.

——, and E. L. **Furlong** 1904 A

Euceratherium, a new ungulate from the Quaternary caves of California.

Bull. Dept. Geol. Univ. Calif., III, 411-418, pls. 50, 51, 1 text-fig.

Abstracts in Geol. Centralbl., VII, 426; Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 469-470; Geol. Mag. (5), I, 465.

——, and W. **Granger** 1911 A

Eocene and Oligocene of the Wind River and Bighorn basins.

Bull. Amer. Mus. Nat. Hist., XXX, 83-117, pls. iv-ix, 4 text-figs.

Abstract in Geol. Centralbl., XX, 694.

—— —— 1911 B

Eocene and Oligocene of the Wind River and Big Horn basins.

Bull. Geol. Soc. Amer., XXII, 722-723 (Abstract).

—— —— 1912 A

Notes on the Tertiary deposits of the Big-Horn basin.

Bull. Amer. Mus. Nat. Hist., XXXI, 57-67, pls. v, vi, 2 text-figs.

—— —— 1914 A

Paleocene deposits of the San Juan basin, New Mexico.

Bull. Amer. Mus. Nat. Hist., XXXIII, 297-316, pls. xx-xxvii, 2 sheets presenting sections.

Abstract in Jour. Geol., XXIV, 305.

——, and G. L. **Jepsen** 1927 A

The skull of *Eusmilus*.

Proc. Amer. Philos. Soc., LXVI, 391-407, 8 figs.

Sippel, W. 1907 A

Das Munddach der Vögel und Säuger.

Morphol. Jahrb., XXXVII, 490-524, 1 plate, 12 text-figs.

This paper is preceded by a note and followed by another by A. Fleischman. There is a bibliography of 8 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 82.

Sirena, Santa 1872 A

Über den Bau und die Entwicklung der Zähne bei den Amphibien und Reptilien.

Verh. phys.-med. Ges. Würzb. (N.F.), II, 124-144, pl. xi.

Sisson, Septimus 1910 A

A text-book of veterinary anatomy.

8vo., 1-826 pages, 588 ills.

The osteology occupies pages 19-168, figs. 1-317, and concerns that of the horse, the ox, the pig and the dog.

Sixta, V. 1899 A

Vergleichend-osteologische Bemerkung über den Schultergürtel des *Ornithorhynchus paradoxus* und der Eidechse *Uromastix spinifer*.

Zool. Anz., XXII, 329-336.

—— 1900 A

Vergleichend-osteologische Untersuchung über den Bau des Schädels von Monotremen und Reptilien.

Zool. Anz., XXIII, 213-229, 3 text-figs.

—— 1900 B

Der Monotremen- und Reptilien-Schädel.

Zeitschr. Morphol. Anthrop., II, 1900, 323-364, 13 text-figs.

—— 1901 A

Vergleichend-osteologische Untersuchung über den Bau der Füsse der Reptilien, Monotremen und Marsupialier. Mit kurzer Übersicht der neuren Litteratur, betreffend die anatomischen Beziehungen zwischen den Reptilien, Monotremen und Mammaliern.

Zool. Anz., XXIV, 321-332.

—— 1905 A

Über den Ursprung der Säugetiere (Mammalia).

Zool. Anz., XXVIII, 671-678.

Note on in Knowledge, II, 608.

Skinner, M. P. 1922 A

The prong-horn.

Jour. Mamm., III, 82-105, pls. vi-ix, 1 text-fig.

The bibliography presents 23 titles.

Skoda, K. 1912 A

Anatomische Untersuchungen an einem Fall von Dydaktylie beider Schultergliedmassen beim Pferd.

Anat. Anz., XLI, 417-434, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 178.

Slade, D. D. 1887 A

Osteological note.

Science (o.s.), IX, 460.

On rudimetary metacarpals in Bison.

Sloan, Earle 1908 A

Catalogue of the mineral localities of South Carolina.

Bull. Carol. Geol. Surv. (4), II, 1-505, pls. i-x; text-figs. 1-18, and a geognostic map.

Slonaker, James Rollin 1920 A

Some morphological changes for adaptation in the mole.

Jour. Morphol., XXXIV, 335-365, pls. i-iv.

The bibliography occupies pages 364, 365.

Smalian, C. 1885 A

Beiträge zur Anatomie der Amphisbæniden.

Zeitschr. wiss. Zool., XLII, 126-202, pls. v, vi.

In the bibliography are 34 titles.

Smallwood, W. M. 1903 A

The remains of bear and deer on the shores of Onondaga Lake.

Science (n.s.), XVIII, 26-27.

Smith, Bertram G. 1907 A

The life history and habits of *Cryptobranchus allegheniensis.*

Biol. Bull., XIII, 5-39, 14 figs.

There is a bibliography of 22 titles.

Smith, Burnett 1909 A

Note on the Miocene drum fish—*Pogonias multidentatus* Cope.

Amer. Jour. Sci. (4), XXVIII, 275-282, 13 text-figs.

Abstract in Geol. Centralbl., XV, 218.

—— 1909 B

On some dinichthyid armor plates from the Marcellus shale.

Amer. Naturalist, XLIII, 588-597, 3 text-figs.

Abstract in Geol. Centralbl., XIV, 342.

—— 1910 A

Notes on some little-known fishes from the New York Devonian.

Proc. Acad. Nat. Sci. Phila., LXII, 656-663, 2 text-figs.

Abstracts in Geol. Centralbl., XVII, 336; Sci. Progress, V, 692.

—— 1914 A

A new locality for *Castoroides.*

Amer. Jour. Sci. (4), XXXVIII, 463-466, 1 text-fig.

—— 1914 B

A review of the mammalian remains from the superficial deposits in the vicinity of Onondaga lake, New York.

Bull. N. Y. State Mus., CLXXI, 64-72, pls. 1-2.

Smith, Dwight T. 1904 A

The geology of the upper region of the Main Walker River, Navada.

Bull. Dept. Geol. Univ. Calif., IV, 1-32, pls. i-iv.

Smith, E. A. 1894 A

Report on the geology of the coastal plain of Alabama.

Geol. Surv. Ala., 1894, i-xxiv+1-759 pages, illustrations.

Smith, G. Elliot 1903 A

The brain of the Archæoceti.

Proc. Roy. Soc. Lond., LXXI, 322-331, 4 text-figs.

Abstract in Geol. Centralbl., VI, 238.

—— 1903 B

The brain of the Archæoceti.

Jour. Comp. Neur., XIII, 41-52, pls. i, ii, 4 text-figs.

—— 1907 A

On the form of the brain in the extinct lemurs of Madagascar, with some remarks on the affinities of the Indrisinæ.

Trans. Zool. Soc. Lond., XVIII, 163-177, text-figs. 53-63.

This paper forms an appendix to one by H. F. Standing (Standing, H. F., 1907 A) on recently discovered subfossil Primates from Madagascar.

—— 1907 B

On the relationship of lemurs and apes.

Nature, LXXVI, 7-8.

See Standing, H. F., 1907 B.

—— 1911 A

The origin of mammals.

Nature, LXXXVIII, 293-294.

—— 1912 A

Discussion on the origin of mammals.

Rep. Brit. Assoc. Adv. Sci., LXXXI, Portsmouth, 1911, 424-428.

—— 1913 A

The evolution of man.

Rep. Smithson. Instn. for 1912, 553-572.

—— 1915 A

Pre-Columbian representations of the elephant in America.

Nature, XCVI, 340-341, 1 fig.; 425, 501, 593, figs.

—— 1916 A

Pre-Columbian representations of the elephant in America.

Nature, XCVI, 593-595, figs. 2, 3.

—— 1916 B

Further notes on pre-Columbian representations of the elephant in America.

Mem. Manchester Soc. (Proc.), LX, xx-xxiii pages.

Smith, G. Elliot—Continued 1920 A

Discussion on the zoological position and affinities of *Tarsius.*

Proc. Zool. Soc. Lond., 1919 (1920), 465-475, 1 fig.

——— 1922 A

Hesperopithecus: The ape-man of the western world.

London News, June 24, 1922, page 944 with figures. On the two preceding pages is a restoration of the creature by Forestier.

Smith, George L. 1915 A

The paleontology and stratigraphy of the Upper Carboniferous of Iowa.

Proc. Iowa Acad. Sci. XXII, 273-283.

Smith, George Otis 1903 A

Description of the Ellensburg quadrangle.

Folio U. S. Geol. Surv., LXXXVI, 1-7, maps.

——— 1904 A

Description of the Mount Stuart quadrangle.

Folio, U. S. Geol. Surv., CVI, 1-10, maps.

Smith, Hugh M. 1916 A

Sharks—man eaters and others.

Amer. Mus. Jour., XVI, 341-355, 24 illustrations.

Smith, J. Hays 1900 A

Fish four-million years old.

Metrop. Mag., XII, 498-506, 8 illustrations.

Smith, James P. 1894 A

The metamorphic series of Shasta County, California.

Jour. Geol., II, 589-612.

——— 1910 A

The geologic record of California.

Jour. Geol., XVIII, 216-227.

Smith, L. H. 1901 A

The extinction of the elk in Ontario.

Ottawa Naturalist, XV, 95-97, 1 text-fig.

Smith, Lucy Wright 1914 A

The origin and development of the columella auris in *Chrysemys marginata.*

Anat. Anz., XLVI, 547-560, 9 text-figs.

Smith, Nathan 1820 A

Fossil bones found in red sandstone.

Amer. Jour. Sci. (1), II, 146-147.

Followed by a note of the editor.

Smith, Warren Dupre, and Earl L. Packard 1919 A

The salient features of the geology of Oregon.

Jour. Geol., XXVII, 79-120, pl. i, 3 figs., 1 table.

There is a bibliography of 60 titles.

Smith, W. Ramsay 1908 A

The evolution of man's teeth, founded upon a study of the development of the teeth of the Australian aboriginal.

Jour. Anat. Physiol. Lond., XLII, 126-131. See also pages 226-235.

Smith, W. S. Tangier 1900 A

A topographic study of the islands of southern California.

Bull. Dept. Geol. Univ. Calif., II, 179-230, pl. v, 4 text-figs.

Snow, F. H. 1878 A

On the dermal covering of a mosasauroid reptile.

Trans. Kansas Acad. Sci., VI, 54-58, 1 pl., 1 text-fig.

Also in Kansas City Rev. Sci. Indust., II, 451-454.

——— 1887 A

On the discovery of a fossil bird-track in the Dakota sand-stone.

Abstract in Amer. Naturalist, XXII, 1888, 50.

Trans. Kan. Acad. Sci., X, 3-6, 1 text-fig.

Sörensen, W. 1894 A

What is, according to our present knowledge, the function of the Weberian ossicles.

Jour. Anat. Physiol. Lond., XXIX, 109-139, 3 figs.

——— 1895 A

What is, according to our present knowledge, the function of the Weberian ossicles?

Jour. Anat. Physiol. Lond., XXIX (n.s. IX), 204-243, 399-423, 518-552, 14 figs.

——— 1897 A

Some remarks on Dr. Thilo's memoir on "Die Umbildungen an den Gliedmassen der Fische."

Morphol. Jahrb., XXV, 170-189, 6 text-figs.

Soergel, Wolfgang 1911 A

Die Pferde aus der Schotterrasse von Steinheim a. d. Murr.

Neues Jahrb. Min. Geol. Pal., Beil. Bd., XXXII, 740-761, pls. xxxiii-xxv..

Soergel, Wolfgang—Continued 1913 A

Elephas trogontherii Pohl. und *Elephas antiquus* Falc., ihre Stammesgeschichte und ihre Bedeutung für die Gliederung des deutschen Diluviums.

Palaeontogr., LX, 1-114, pls. i-iii, 8 tables, 14 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 350-351; Geol. Centralbl., XX, 314-316; Zeitschr. u. Abstamm. u. Vererb.-Lehre, X, 172-174; Rev. crit. Paléozool., XVII, 207-209; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 213.

——— 1914 A

Stegodonten aus den Kendenschichten auf Java.

Palaeontogr., Suppl. IV, III Abt., I, Lief., 1-24, pls. i, ii.

——— 1915 A

Die Stammesgeschichte der Elephanten.

Centralbl. Min. Geol. Pal., 1915, 179-188, 208-215, 245-253, 278-284.

Abstract in Geol. Zentralbl., XXII, 126.

——— 1915 B

Das vermeintliche Vorkommen von *Elephas planifrons* in Niederösterreich.

Palaeont. Zeitschr., II, 1-65, 12 figs.

——— 1921 A

Elephas columbi Falconer. Ein Beitrag zur Stammesgeschichte der Elefanten und zum Entwicklungsmechanismus des Elefantengebisses.

Geol. Pal. Abh. Jena, XVIII (N.F. XIV), 1-100, pls. i-viii, 6 text-figs.

The cited literature includes 42 titles.

Sokolowsky, Alexander 1904 A

Die Variationen der Schuppenbildung des Kopfes, von *Scincus officinalis*.

Biol. Centralbl., XXIV, 754-761, 4 figs.

——— 1908 A

Neues aus der Biologie der Walrosse.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1908, 237-253, 5 text-figs.

——— 1909 A

Biologische Beobachtungen über Walrosse.

Aus der Natur, IV, Heft 20, 636-639.

——— 1919 A

Zur Biologie und Stammesgeschichte des Katzenbären (*Ailurus fulgens* F. Cuv.).

Zool. Anz., L, 238-244.

Solger, B. 1879 A

Die Seitenorgane von *Chimæra*.

Arch. mikr. Anat. Bonn, XVII, 95-113, pl. vii.

——— 1880 A

Die Seitenorgane der Knochenfische.

Arch. mikr. Anat. Bonn, XVIII, 364-390, pl. xvii.

——— 1880 B

Die Seitenorgane der Selachier.

Arch. mikr. Anat. Bonn, XVII, 458-479, pl. xxxix.

Sollas, Ignera B. J., and W. J. **Sollas** 1913 A

Note on the dicynodont vomer.

Nature, XCII, 61.

——— ——— 1914 A

A study of the skull of a *Dicynodon*, by means of serial sections.

Phil. Trans. Roy. Soc. Lond., CCIV, 201-223, pls. xvii, xviii, 9 text-figs.

Published separately Oct. 30, 1913.

There are numerous references in footnotes to the literature of the subject.

——— ——— 1916 A

On the structure of the dicynodont skull.

Phil. Trans. Roy. Soc. Lond., CCVII, B, 531-539, pls. xxxv, xxxvi.

Sollas, W. J. 1916 A

The skull of *Ichthyosaurus* studied in serial sections.

Phil. Trans. Roy. Soc. Lond. (B), CCVIII, 63-126, 1 pl., 22 text-figs.

Abstract in Rev. crit. Paléozool., XXVI, 93.

Review in Geol. Mag. (6), III, 571.

——— 1918 A

Note on *Lysorophus*.

Ann. Mag. Nat. Hist. (9), II, 239-240, figs. 4, 5.

——— 1920 A

On the structure of *Lysorophus*, as exposed by serial sections.

Phil. Trans. Roy. Soc. Lond. (B), CCIX, 481-527, pl. lxx, 44 text-figs.

Abstract in Rev. crit. Paléozool., XXVI, 93.

———, and I. B. J. **Sollas** 1903 A

An account of the Devonian fish, *Palæospondylus gunni* Traquair.

Philos. Trans. Roy. Soc. Lond., CXCVI, 267-294, pls. xvi, xvii.

The bibliography presents 28 titles.

Sonies, F. 1907 A
Ueber die Entwickelung des Chondrocraniums und der knorpeligen Wirbelsäule bei den Vögeln.
Petrus Camper, Bijdr. Anat., Haarlem, IV, 395-486, pls. vii-x.
On pages 478-480 is a bibliography of 44 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 84.

Sonntag, C. F. See **Clark** and **Sonntag.**

Southall, James C. 1875 A
The recent origin of man, as illustrated by geology and the modern science of prehistoric archæology.
8vo., 1-606 pages, with illustrations.

—— 1878 A
The epoch of the mammoth and the apparition of man upon the earth.
London, 8vo., i-xv+1-430 pages, illustrations.
Reviewed in Geol. Mag., London (2), V, 356-360; Nature, XVIII, 245-246.

Southwell, T., and S. F. **Harmer** 1893 A
Notes on a specimen of Sowerby's whale (*Mesoplodon bidens*), stranded on the Norfolk coast.
Ann. Mag. Nat. Hist. (6), XI, 275-284, pl. XV.
The literature is cited in foot-notes.

Spencer, J. W. 1883 A
Surface geology of the region about the western end of Lake Ontario.
Canad. Naturalist (n.s.), X, 213-236, 265-312.

—— 1895 A
Reconstruction of the Antillean continent.
Jour. Geol., VI, 103-140, pl. i.

—— 1898 A
The West Indian bridge between North and South America.
Pop. Sci. Month., LIII, 10-30, pls. i-iv, 9 text-figs.

Spencer, W. Baldwin 1886 A
On the presence and structure of the pineal eye in Lacertilia.
Quart. Jour. Micr. Sci. (n.s.), XXVII, 165-238, pls. xiv-xx.

Spengel, J. W. 1892 A
Schnitte durch die Säge von *Pristis*-Embryonen.
Verh. deutsch. Zool. Ges., II, 1892, 147.

—— 1905 A
In Beziehung auf Mund- und Schlundzähne der Elasmobranchier.
Zool. Anz., XXIX, 332-333.

Sperry, L. B. 1884 A
Mastodon remains.
Rep. Geol. Nat. Hist. Surv. Minn. Final Rep., I, 670.
Letter to Prof. N. H. Winchell regarding mastodon tusk found at Northfield, Minn.

Spillman, F. 1925 A
Beiträge zur Biologie des Flügels und der Lebensweise der Pterosaurier.
Palaeont. Zeitschr., VII, 184-192, 6 figs.

Spillman, William 1863 A
Catalogue of Tombigbee greensand.
Rep. Geol. Agric. Miss., 1860 (1863), 389.

Spinden, Herbert J. 1916 A
Pre-Columbian representations of the elephant in America.
Nature, XCVI, 592-593, 1 fig.

Springer, Frank 1924 A
Letter regarding Saint-John collection of fishes, addressed to Dr. G. P. Merrill.
Pan-Amer. Geologist, XLII, 233-234.

Spurgin, A. M. 1904 A
Enamel in the teeth of an embryo edentate (*Dasypus novemcinctus* Linn.).
Amer. Jour. Anat., III, 75-84, 2 pls.

Spurr, Josiah Edward 1898 A
Geology of the Yukon Gold District, Alaska.
Rep. U. S. Geol. Surv., XVIII, pt. III, 87-392, pls. xxxii-li, text-figs. 7-25.

—— 1900 A
A reconnaissance in southwestern Alaska.
Rep. U. S. Geol. Surv., XX, pt. VII, 31-264, maps 4-14, pls. vii-xiii, 15 text-figs.

Spurrell, H. George F. 1906 A
The articulation of the vertebrate jaw.
Proc. Zool. Soc. Lond., 1906, I, 114-123, text-figs. 34-47.

Stach, Jean 1905 A
Ueber die Entstehung des Ersatzgebisses und der Backenzähne bei den Säugetieren.
Bull. internat. Acad. Sci. Cracovie, 1904 (1905), 283-298, 6 figs.

Stadelmann, F. 1916 A
Die sog. Gaumenfortsätze und die Umlagerung der Gaumens.
Morphol. Jahrb., L, 115-165, pls. viii, ix, 14 text-figs.
The bibiography presents 10 titles.

Stadtmüller, Franz 1925 A

Studien am Urodelenschädel. I: Zur Entwicklungsgechichte des Kopfskelets der *Salamandra maculosa.*

Zeitschr. Anat. Entwicklungsges., Abt. I, LXXV, 149-225, 41 figs.

The bibliography occupies pages 223-225.

—— 1926 A

Vorläufige Mitteilungen über die Filterfortsätze des Kiemenbogen niederer Wirbeltiere.

Verh. Anat. Ges., XXXV, 155-163, 7 figs.

Stalker, M. 1899 A

Remains of the mammoth.

Iowa Geol. Surv., IX, 210-211.

Stalnaker, A. M. 1884 A

Mastodon remains in Missouri.

Kansas City Rev. Sci. Indust., VII, 615-616.

Standing, Herbert F. 1907 A

On recently discovered subfossil Primates from Madagascar.

Trans. Zool. Soc. Lond., XVIII, 59-162, pls. X-XXVIII, 52 text-figs.

For an appendix to this paper see Smith, G. E., 1907 A.

—— 1907 B

The relationship of lemurs and apes.

Nature, LXXVI, 55.

See Smith, G. E., 1907 B.

Stanley-Brown, Joseph 1892 A

Geology of the Pribilof Islands.

Bull. Geol. Soc. Amer., III, 496-500.

Stannius, H. 1842 C

Ueber die Knochen des Seitencanales der Fische.

Froriep's Notizen, XXII, cols. 97-100.

—— 1846 B

Beiträge zur Kenntniss des amerikanischen Manati's.

Rectorats-Programm. Rostock. 37 pages, 2 pls. (Not seen.)

—— 1849 A

Ueber die Deckknochen und die integrirenden Ossificationen der Wirbel einiger Knochenfische.

Arch. Anat. Physiol. Med., 1849, 533-542, pl. vii.

—— 1850 A

Ueber eine osteologische Eigenthümlichkeit des *Delphinus globiceps.*

Arch. Anat. Physiol. Med., 1850, 508-509, pl. xv, fig. 3.

Stansfield, J. 1915 A

The Pleistocene and Recent deposits of the island of Montreal.

Can. Geol. Surv. Mem., LXXIII (Geol. ser. LVIII), i-iv+1-80 pages, 2 maps, 2 pls., 10 text-figs.

Stanton, T. W. 1902 A

The stratigraphic position of the Judith River beds. A correction of Mr. Hatcher's correction.

Science (n.s.), XVI, 1031-1032.

—— 1905 A

The Morrison formation and its relations with the Comanche series and the Dakota formation.

Jour. Geol., XIII, 657-669.

Abstract in Geol. Centralbl., VIII, 52.

—— 1909 A

The age and stratigraphic relations of the "Ceratops beds" of Wyoming and Montana.

Proc. Wash. Acad. Sci., XI, 239-293.

Abstract in Geol. Centralbl., XIV, 50.

—— 1910 A

Fox Hills sandstone and "Ceratops beds" in South Dakota, North Dakota and eastern Wyoming.

Science (n.s.), XXXII, 63-64.

—— 1910 B

Fox Hills sandstone and Lance formation ("Ceratops beds") in South Dakota, North Dakota and eastern Wyoming.

Amer. Jour. Sci. (4), XXX, 172-188.

Abstract in Geol. Centralbl., XV, 540.

—— 1914 A

Boundary between Cretaceous and Tertiary in North America as indicated by stratigraphy and invertebrate faunas.

Bull. Geol. Soc. Amer., XXV, 341-354.

—— 1920 A

The fauna of the Cannonball marine member of the Lance formation.

U. S. Geol. Surv. Profess. Pap. 128-A, 1-60, pls. i-x, 3 text-figs.

——, and J. B. **Hatcher** 1905 A

Geology and palæontology of the Judith River beds.

Bull. U. S. Geol. Surv., CCLV, 9-66, pls. i-xi.

Abstracts in Amer. Jour. Sci. (4), XXI, 177-179; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 282-283; Geol. Centralbl., VIII, 27.

Stappenbeck, Richard 1905 A
Über *Stephanospondylus* n. g. und *Phanerosaurus* H. v. Meyer.
Zeitschr. deutsch. Geol. Ges., LVII, 380-437, pl. xix, 35 text-figs.

Starks, E. C. 1899 B
The osteology and relationship of the percoidean fish *Dinolestes lewini.*
Proc. U. S. Nat. Mus., XXII, 113-120, pls. viii-xi.

—— 1901 A
Synonymy of the fish skeleton.
Proc. Wash. Acad. Sci., III, 507-539, pls. lxiii-lxv, text-figs. 45-46.

—— 1902 A
The shoulder girdle and characteristic osteology of the hemibranchiate fishes.
Proc. U. S. Nat. Mus., XXV, 619-634, 6 text-figs.

—— 1904 A
The osteology of *Dallia pectoralis.*
Zool. Jahrb., XXI, 249-262, 2 text-figs.

—— 1904 B
The osteology of some berycoid fishes.
Proc. U. S. Nat. Mus., XXVII, 601-619, 10 text-figs.

—— 1904 C
A synopsis of characters of some fishes belonging to the order Haplomi.
Biol. Bull., VII, 254-262.

—— 1905 A
Some notes on the myodome of the fish cranium.
Science (n.s.), XXI, 754-755.

—— 1908 A
On the orbitosphenoid in some fishes.
Science (n.s.), XXVIII, 413-415.

—— 1909 A
The scombroid fishes.
Science (n.s.), XXX, 572-574.

—— 1910 A
The osteology and mutual relationships of the fishes belonging to the family Scombridæ.
Jour. Morphol., XXI, 77-99, pls. i-iii, 2 text-figs.

—— 1911 A
A possible line of descent of the gobioid fishes.
Science (n.s.), XXXIII, 747-748.

—— 1911 B
Osteology of scombroid fishes.
Stanf. Univ. Publ. Univ. Ser., v, 1-49, 2 pls., 1 text-fig.

Starks, E. C.—Continued 1916 A
The sesamoid articular. A bone in the mandible of fishes.
Stanf. Univ. Publ. Univ. Ser., XXII, 1-40, 15 figs.

—— 1926 A
Factors of fish classification.
Amer. Naturalist, LX, 82-94.

Starling, E. H. 1910 A
Origin of vertebrates.
Proc. Linn. Soc. Lond., CXXII, 20-24.

Staudinger, Wilhelm 1908 A
Præovibos priscus nov. gen. et nov. sp. ein Vertreter einer *Ovibos* nahestehenden Gattung aus dem Pleistocän Thüringens.
Centralbl. Min. Geol. Pal., 1908, 481-502, 4 text-figs.
Pages 493-496 are devoted to the synonymy and literature of Ovibovinæ.

Stauffer, Clinton R. 1909 A
The Middle Devonian of Ohio.
Bull. Geol. Surv. Ohio (4), X, i-viii+1-204 pages, pls. i-xvii.

—— 1924 A
The fossil elephants of Minnesota.
Science (n.s.), LX, 40-41.

—— 1926 A
Addenda. 1 page.
A page attached to Stauffer's paper of 1924, Stauffer, C., 1924 A: "On the elephants of Minnesota." Additional occurrences are recorded.

——, and C. R. **Schroyer** 1920 A
The Dunkard series of Ohio.
Bull. Geol. Surv. Ohio (4), XXII, 141-151, pls. xi-xiii.

Stearns, Robert E. C. 1873 A
Report of a fossil elephant tooth found on Santa Rosa Island.
Proc. Calif. Acad. Sci., V, 152.

Steele, L. L. 1906 A
An additional sacral vertebra in the horse.
Vet. Jour. LXII (n.s. XIII), 290-295, 2 figs.

Steenstrup, J. 1861 A
Sur la différence entre les poissons osseux et les poissons cartilagineux au point de vue de la formation des écailles.
Arch. Sci. Phys. Nat., XI, 368.
See also Ann. Sci. Nat., (4), XV, 368.

——, and C. J. **Sundevall** 1860 A
Ueber das Wallross.
Zeitschr. gesamt. Naturw., XV, 270-275.
From Ov. Denske Selsk., 1859, 441 seq.

Stefanescu, Sabba 1913 A

Sur la structure de la couronne des molaires d'éléphant.

C. R. Acad. Sci. Paris, CLVII, 611-612.

—— 1913 B

Sur la phylogénie de la couronne des molaires de mastodontes et éléphants.

C. R. Acad. Sci. Paris, CLVII, 735-736.

—— 1913 C

Sur la ramification des tubercules dentaires des molaires d'*Elephas*, de *Stegodon* et de *Mastodon*.

C. R. Acad. Sci. Paris, CLVII, 882-884.

—— 1914 A

Sur l'origine des lames cunéiformes des molaires d'éléphants.

C. R. Acad. Sci. Paris, CLVIII, 1043-1045.

—— 1915 A

Sur l'origine de quelques accidents de la couronne des molaires d'éléplants; champs de dentine, lames pseudocunéiformes, figures géminées et pseudogéminées, ilôts géminées.

C. R. Acad. Sci. Paris, CLXI, 100-103.

—— 1918 A

Sur une nouvelle voie à suivre pour étudier la phylogénie des mastodontes, stégodontes, et éléphants.

C. R. Acad. Sci. Paris, CLXVI, 739-742.

—— 1919 A

Sur la phylogénie de l'*Elephas africanus*.

C. R. Acad. Sci. Paris, CLXVIII, 97-99.

—— 1919 B

Sur les sections transversales des lames des molaires d'*Elephas africanus*.

C. R. Acad. Sci. Paris, CLXVIII, 464-467.

—— 1919 C

Sur la coordination des caractères morphologiques et des mouvements des molaires des éléphants et des mastodontes.

C. R. Acad. Sci. Paris, CLXVIII, 906-908.

—— 1919 D

Sur la structure des lames des molaires de l'*Elephas indicus* et sur l'origine différente des deux espèces d'éléphants vivants.

C. R. Acad. Sci. Paris, CLXVIII, 1208-1211.

—— 1919 E

Sur l'application pratique des caractères de la racine des molaires des éléphants et des mastodontes.

C. R. Acad. Sci. Paris, CLXVIII, 1329-1332.

Stefanescu, Sabba—Continued 1919 F

Sur les fosses alvéolaires, les ériodontes, les loges alvéolaires, et les alvéoles des éléphants et des mastodontes.

C. R. Acad. Sci. Paris, CLXIX, 148-151.

—— 1920 A

Sur la phylogénie de l'*Elephas meridionalis*.

C. R. Acad. Sci. Paris, CLXXI, 811-814.

—— 1921 A

Sur l'asymétrie et sur les sections longitudinales techniques de la couronne des molaires des mastodontes et des éléphants.

C. R. Acad. Sci. Paris, CLXXII, 929-931.

—— 1921 B

Sur quelques caractères morphologiques de la couronne des molaires des mastodontes et des éléphants.

C. R. Acad. Sci. Paris, CLXXII, 1054-1056.

—— 1921 C

Sur la corrélation des fosses alvéolaires, des mouvements et de le structure des dernières molaires des mastodontes et des éléphants.

C. R. Acad. Sci. Paris., CLXXII, 1516-1518.

—— 1921 D

Sur la valeur phylogénétiques et évolutive des formules lamellaires des dernières molaires M1/1, M2/2, M3/3, des mastodontes et des éléphants.

C. R. Acad. Sci. Paris, CLXXII, 1669-1672.

Stefánnson, V. 1912 A

The probable recent extinction of the muskox in Alaska.

Science (n.s.), XXXVI, 720-721.

Stefano, Giuseppe 1901 A

Alcuni pesci pliocenici di Calanna in Calabria.

Boll. Soc. geol. Ital., XX, 552-562, pl. X.

—— 1904 A

I sauri del Quercy appartenenti alla collezione Rossignol.

Atti. Soc. Ital. Sci. Nat., XLII, 382-418, pls. IX, X.

—— 1912 A

Studio sui pesci fossili della pietra di Bismantova (Provincia di Reggio-Emilia).

Boll. Soc. geol. Ital., XXX, 351-422, pls. XII-XIV.

With the bibliography in foot-notes.

Abstract in Geol. Zentralbl., XIX, 190.

Stefano, Giuseppe—Continued 1912 B

Appunti sulla ittiofauna fossile dell' Emilia conservata nel Museo geologico dell' Università di Parma.

Boll. Soc. geol. Ital., xxxi, 35-78, pls. i-ii.

Bibliography in foot-notes.

Abstract in Geol. Zentralbl., xix, 188-189.

—— 1915 A

Sopra alcuni molari elefantini fosili americani.

Boll. Soc. geol. Ital., xxxiv, 209-218, pl. xi.

—— 1917 A

Le tatarughe fossili della famiglia Ptychogasteridæ.

Atti. Soc. Ital. Sci. Nat., lv, 278-288.

Stehli, Georg 1910 A

Ueber die Beschuppung der Reptilien.

Jena. Zeitschr. Naturwiss., xlvi, 737-800, pl. xxviii, 19 text-figs.

There is a bibliography of 54 titles.

Brief abstract in Neues Jahrb. Min. Geol. Pal., 1911, i, Ref., 319.

Stehlin, H. G. 1899 A

Abstract in Geol. Centralbl. ii, 730.

—— 1903 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. Die Fundorte. Die Sammlungen.

Abh. Schweiz. pal. Ges., xxx, i-vi+1-153 pages, pls. i-iii, 5 text-figs.

For résumé see Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 492-496; Rev. crit. Paléozool., x, 133-137; Jahresber. Anat. Entwickl. (N.F.), ix, pt. 3, 188-189; Geol. Centralbl., xi, 598.

—— 1904 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 2ter Teil:

Abh. Schweiz. pal. Ges., xxxi, 155-445, pls. iv-ix, 22 text-figs.

Abstract in Rev. crit. Paléozool., x, 133-137; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 174-177.

—— 1905 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 3ter Teil:

Abh. Schweiz. pal. Ges., xxxii, 447-595, pls. x, xi, 34 text-figs.

Abstract in Rev. crit. Paléozool., x, 133-137; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 174-177.

Stehlin, H. G.—Continued 1906 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 4ter Teil:

Abh. Schweiz. pal. Ges., xxxiii, 597-690. pl. xii, 34 text-figs.

—— 1907 A

Les types du "Lophiodon de Montpellier" de Cuvier. (*Hyœnarctos insignis* P. Gerv.).

Bull. Soc. géol. France (4), vii, 219-223, 1 text-fig.

—— 1908 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 5ter Teil:

Abh. Schweiz. pal. Ges., xxxv, 691-837, pls. xiii, xiv, 36 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, i, Ref., 446-454; Rev. crit. Paléozool., xiii, 194-195.

—— 1910 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 6ter Teil:

Abh. Schweiz. pal. Ges., xxxvi, 839-1164, pls. xv-xx, 110 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, ii, Ref., 121-128; Rev. crit. Paléozool., xv, 16-18.

—— 1912 A

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 7ter Teil, erste Hälfte: Adapis.

Abh. Schweiz. pal. Ges., xxxviii, 1165-1298, 46 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, ii, Ref., 329-331; Rev. crit. Paléozool., xvii, 68-70.

—— 1916 A

Über einen Ovibosfund aus dem späten Pleistocän des schweizerischen Mittellandes.

Verh. Naturf. Ges. Basel, xxvii, 93-99, 4 text-figs.

—— 1916 B

Die Säugetiere des schweizerischen Eocaens. Critischer Catalog der Materialien. 7ter Th. 2te Hälfte.

Abh. Schweiz. pal. Ges., xli, 1297-1552, pls. xxi, xxii, text-figs. 290-371.

Abstract in Rev. crit. Paléozool., xxi, 4-6.

Steiner, Hans 1916 A

Das Problem der Diastataxie des Vogelflügels.

Vierteljahrschr. naturf. Ges. Zurich., lxi, 488-502, 3 figs.

Steiner, Hans—Continued 1918 A

Das Problem der Diastataxie des Vogelflügels.

Jena. Zeitschr. Naturwiss., LV (n.s. XLVIII), 221-496, pls. ix-xi, 49 text-figs.

The bibliography occupies pages 482 to 489.

—— 1921 A

Hand und Fuss der Amphibien, ein Beitrag zur Extremitätenfrage.

Anat. Anz., LIII, 513-542, 14 figs.

The bibliography furnishes 44 titles.

—— 1922 A

Die ontogenetische und phylogenetische Entwicklung des Vogelflügelskelettes.

Acta. Zool., III, 307-360, 19 figs.

The bibliography comprises 81 titles.

Steinhard, Otto 1903 A

Ueber Placoidschuppen in der Mund- u. Rachen-Höhle der Plagiostomen.

Arch. Naturges., LXIX, Bd. I, 1-46, pls. i, ii.

Steinmann, Gustav 1907 A

Einführung in die Paläontologie.

8vo., Leipzig, i-xii+1-542 pages, 902 figs. Only pages 389-542 are devoted to the vertebrates.

Abstracts in Naturw. Wochenschr., XXIV (N.F. VIII), 408-412; Geol. Mag. (5), V, 38.

—— 1908 A

Die geologischen Grundlagen der Abstammungslehre.

8vo., Leipsig, i-ix+1-284 pages, 172 figs. Only pages 203-284 are devoted to the vertebrates.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 470-480; Naturw. Wochenschr., XXIV (N.F. VIII), 408-412; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 156.

—— 1909 A

Zur Abstammung der Säuger.

Zeitschr. indukt. Abstamm. Vererbl., II, 65-90, 18 text-figs.

Abstract in Rev. crit. Paléozool., XIII, 201.

—— 1910 A

Zur Phylogenie der Dinosaurier.

Zeitschr. indukt. Abstamm. Vererbl., III, 98-103.

Abstract in Rev. crit. Paléozool., XIV, 271.

—— 1912 A

Über die Ursache der Asymmetrie der Wale.

Anat. Anz., XLI, 45-54, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 137; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 179.

Steinmann, Gustav—Continued 1912 B

Die Bedeutung der Paläontologie für die Abstammungslehre.

Proc. internat. Zool. Congr., VII, Boston, 1907, 714-732.

—— 1922 A

Laufvögel und Flugvögel.

Anat. Anz., IV, 239-244.

Stejneger, Leonhard 1901 A

Former land connections between Asia and North America.

Science (n.s.), XIII, 308.

—— 1901 B

Scharff's "History of the European Fauna."

Amer. Naturalist, XXXV, 87-116.

A review of a work by R. F. Scharff published in 1899.

—— 1902 A

Some generic names of turtles.

Proc. Biol. Soc. Wash., XV, 235-238.

—— 1903 A

Ridgeway's classification of the Falciformes.

Science (n.s.), XVII, 628-629.

—— 1904 A

Amphibia versus Batrachia.

Science (n.s.), XX, 924-925.

—— 1905 A

Generic names of soft-shelled turtles.

Science (n.s.), XXI, 228-229.

—— 1907 A

The origin of the so-called Atlantic animals and plants of western Norway.

Smithson. Misc. Coll. (Quart. issue), III, 458-513, map, 3 plates.

—— 1907 B

The systematic position of the Tubinares.

Amer. Naturalist, XLI, 281-282.

Remarks on Shufeldt, 1907 A.

—— 1907 C

Herpetology of Japan and adjacent territory.

Bull. U. S. Nat. Mus., LVIII, i-xx+1-577 pages, 35 pls. 409 figs.

—— 1919 A

The systematic name of the Pacific walrus.

Proc. Biol. Soc. Wash., XXVII, 145.

—— 1923 A

Rehabilitation of a hitherto overlooked species of musk turtle of the southern states.

Proc. U. S. Nat. Mus., LXII, art. 6, 1-3.

Stejneger, Leonhard—Cont'd 1928 A
Unsolved problems in arctic zoogeography.
Amer. Geogr. Soc. Special Publ. No. 7, 155-165.

——, and Thomas **Barbour** 1917 A
A check list of North American amphibians and reptiles.
Cambridge, Harvard Univ. Press, i-iv+5-125 pages.

—— —— 1923 A
A check list of North American amphibians and reptiles. Second edition.
Cambridge, i-x; 1-171 pages.

Stellwaag, Friedrich 1912 A
Die embryonale Metamorphose der Mundrachenwand beim Kanarienvogel (*Fringilla canaria*).
Morphol. Jahrb., XLIV, 627-659, 33 text-figs., pls. xvii, xviii.

Stensiö, Erik A. 1918 A
Notes on a crossopterygian fish from the Upper Devonian of Spitzbergen.
Bull. Geol. Instn. Upsala, XVI, 115-124, pls. iv-vi.
The bibliography presents 20 titles.

—— 1921 A
Triassic fishes from Spitzbergen. Pt. I.
4to., Vienna, i-xxviii+1-307 pages, 34 pls., 87 text-figs.
The bibliography occupies pages 279 to 291. Abstract in Amer. Jour. Sci. (4), III, 479.

—— 1922 A
Notes on certain crossopterygians.
Proc. Zool. Soc. Lond., 1922, 1241-1271, pl. 1, 6 text-figs.
There is a bibliography of 42 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1925, I, 283.

—— 1922 B
Über zwei Coelacanthiden aus dem Oberdevon von Wildungen.
Palaeont. Zeitschr., IV, 167-210, pls. iii-v, 9 text-figs.
There are 34 titles in the bibliography.

—— 1925 A
Triassic fishes from Spitzbergen. Pt. II.
Svensk. Vet. Akad. Handl. (3), II, No. 1, 1-261, pls. i-xxxiv, 58 text-figs.
The bibliography occupies pages 229-238.
Abstract in Neues Jahrb. Min. Geol. Pal., 1925, II, 86; Rev. crit. Paléozool., XXVI, 7-10.

Stensiö, Erik A.—Continued 1925 B
On the head of the macropetalichthyids.
Field Mus. Nat. Hist. Geol., IV, 89-198, pls. xix-xxxi, 26 text-figs.
Appended is a bibliography of 126 titles.
Comment on in Jour. Geol., XXXIV, 672; Nature, CXII, 740; CXVII, 28.

—— 1926 A
On the sensory canals of *Pteraspis* and *Palæaspis*.
Arkiv Zool., XVIII, No. 19, 1-14, 7 text-figs.

—— 1927 A
The Downtonian and Devonian vertebrates of Spitzbergen. Pt. I: Family Cephalaspidae.
Norske Vidensk.-Akad., Oslo Skr. Svalb. Nordish. No. 12, i-xii+1-391 pages, 112 pls., 103 text-figs.
Pages 381-391 are occupied by the bibliography.
Review in Science (n.s.), LXVII, 348.

Stephan, P. 1898 A
Recherches histologiques sur la structure des corps vertébraux des poissons téléostéens.
Arch. Anat. micr. Paris, II, 355-372, pl. xv.
The bibliography comprises 27 titles.

—— 1900 A
Recherches histologiques sur la structure du tissu osseux des poissons.
Bull. Sci. France Belgique, XXXIII, 281-429, pls. i-viii, 3 text-figs.
There is a bibliography of 141 titles. Abstract in C. R. Assoc. Franc. Avanc. Sci., XXVIII, 1900, 272.

Stephenson, L. W. 1912 A
The Cretaceous formation [of the Coastal Plain of North Carolina].
N. Car. Geol. Econ. Surv., III, 73-171, pls. i-vi, 14 text-figs.

—— 1912 B
The Quaternary formation [of the Coastal Plain of North Carolina].
N. Car. Geol. Econ. Surv., III, 261-290, pls. xii, xvi-xxvii.

—— 1918 A
A contribution to the geology of northeastern Texas and southern Oklahoma.
U. S. Geol. Surv. Profess. Pap., CXX, 127-163, pls. xvii-xxx.

—— See also **Veatch** and **Stephenson.**

Sterling, E. 1886 A
[Letter to Davenport Academy of Sciences regarding relation of mastodon and mammoth to man.]
Proc. Davenport Acad. Sci., IV, 309.

Sterling, Stefan 1908 A

Sind die Ossa suprasternalia beim Menschen auf das Episternum der niederen Wirbeltiere zurückzuführen?

Anat. Anz., XXXII, 333-334.

—— 1910 A

Études sur l'anatomie et le fonctionnement des extrémités antérieures des Cétacés.

Warszawa Spraw. Tow. Nauk., III, 179-193, 6 figs. Text in Polish.

The bibliography presents 10 titles.

—— 1910 B

On the asymmetry of the skull of whales.

Warszawa. Spraw. Tow. Nauk., III, 231-235, 2 figs. Text in Polish.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVII, pt. 3, 78.

—— 1910 C

Beiträge zur Kenntnis der Musculatur des Schultergürtels und der Vorderextremität bei Zahn- und Bartenwalen.

Jena. Zeitschr. Naturwiss., XLVI (N.F. XXXIX), 667-680, pl. XXIV, 4 text-figs.

The bibliography presents 14 titles.

Sternberg, Charles H. 1881 A

The Miocene beds of the John Day River, Oregon.

Kansas City Rev. Sci. Indust., IV, 540-542.

—— 1881 B

The Niobrara group.

Kansas City Rev. Sci. Indust., V, 1-4.

—— 1881 C

Miocene fauna of Oregon.

Kansas City Rev. Sci. Indust., V, 416-417.

—— 1882 A

The Loup Fork group of Kansas.

Kansas City Rev. Sci. Indust., VI, 205-208.

—— 1883 A

Explorations in the Judith River group.

Kansas City Rev. Sci. Indust., VII, 325-330.

—— 1883 B

The Triassic beds of Texas.

Kansas City Rev. Sci. Indust., VII, 455-457.

—— 1884 A

The fossil fields of southern Oregon.

Kansas City Rev. Sci. Indust., VII, 596-599.

—— 1884 B

Explorations in northern Oregon.

Kansas City Rev. Sci. Indust., VII, 674-678.

Sternberg, Charles H.—Cont'd 1898 A

Pliocene man.

Pop. Sci. News, XXXII, 82.

Describes visit made to Fossil Lake, Oregon.

—— 1898 B

A mine of mammoths.

Pop. Sci. News, XXXII, 169.

Records finding of elephant remains, with those of horse and small dog, in Lane County, Kansas.

—— 1898 C

Ancient monsters of Kansas.

Pop. Sci. News, XXXII, 268.

—— 1899 B

Kansas rhinoceros deposit.

Pop. Sci., XXXIII, 105.

—— 1899 C

A Kansas mosasaur.

Pop. Sci., XXXIII, 259-260.

—— 1900 A

Fossil collector's experiences.

Pop. Sci., XXXIV, 34.

—— 1900 B

The sharks of Kansas.

Pop. Sci., XXXIV, 38.

—— 1902 A

Letter to Editor of Science.

Science (n.s.), XVI, 989-990.

—— 1903 A

Elephas columbi and other mammals in the swamps of Whitman Co., Washington.

Science (n.s.), XVII, 511-512.

Brief notice in Geol. Centralbl., IX, 725.

—— 1903 B

Age of the Judith River beds.

Science (n.s.), XVII, 356-357.

—— 1903 C

Notes on the Judith River group.

Science (n.s.), XVII, 870-872.

—— 1903 D

Experiences with early man in America.

Trans. Kansas Acad. Sci., XVIII, 89-93.

—— 1903 E

The Permian life of Texas.

Trans. Kansas Acad. Sci., XVIII, 94-98.

—— 1905 A

Protostega gigas and other Cretaceous reptiles and fishes from the Kansas chalk.

Trans. Kansas Acad. Sci., XIX, 123-128, pls. XVIII, XIX.

—— 1906 A

The Loup Fork Miocene of western Kansas.

Trans. Kansas Acad. Sci., XX, 71-74.

Sternberg, Charles H.—Cont'd 1907 A
Portheus molossus Cope, and other fishes from the Kansas chalk.
Science (n.s.), xxv, 295.

—— 1907 B
The great inferior tusked mastodon of the Loup Fork Miocene.
Science (n.s.), xxv, 971-972.
Abstract in Sci. Progress, II, 511.

—— 1907 C
Some animals discovered in the fossil beds of Kansas.
Trans. Kan. Acad. Sci., xx, pt. 2, 122-124.

—— 1908 A
My expedition to the Kansas chalk for 1907.
Trans. Kansas Acad. Sci., xxi, 111-114, 1 text-fig.

—— 1909 A
Expedition to the Laramie beds of Converse County, Wyoming.
Trans. Kansas Acad. Sci., xxii, 113-116.

—— 1909 B
An armored dinosaur from the Kansas chalk.
Trans. Kansas Acad. Sci., xxii, 257-258, 3 plates.

—— 1909 C
The life of a fossil hunter. With an introduction by Henry Fairfield Osborn.
i-xiii+1-286 pages, 46 illustrations.
Reviewed in Nature, lxxxii, 36.

—— 1909 D
A new trachodon from the Laramie beds of Converse County, Wyoming.
Science (n.s.), xxix, 753-754.

—— 1909 E
In the Laramie beds of Wyoming.
Guide to Nature, II, 123-130, 9 figs.

—— 1911 A
In the Niobrara and Laramie Cretaceous.
Trans. Kan. Acad. Sci., xxiii, 70-74, 1 text-fig.

—— 1911 B
Still in the Laramie Country, Converse County, Wyoming.
Trans. Kan. Acad. Sci., xxiv, 219-223.
Abstract in Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 143.

—— 1913 A
Expeditions to the Miocene of Wyoming and the chalk beds of Kansas.
Trans. Kan. Acad. Sci., xxv, 45-49, 1 fig.

Sternberg, Charles H.—Cont'd 1914 A
Notes on the fossil vertebrates collected on the Cope expedition to the Judith River and Cow Island beds, Montana.
Science (n.s.), xl, 134-135.

—— 1915 A
Evidence proving that the Belly River beds of Alberta are equivalent with the Judith River beds of Montana.
Science (n.s.), xlii, 131-133.
Abstract in Bull. Geol. Soc. Amer., xxvi, 149.

—— 1917 A
Hunting dinosaurs in the Bad Lands of the Red Deer river, Alberta, Canada. A sequel to "The life of a fossil hunter."
i-xiii+1-232 pages, 52 illustrations.

—— 1918 A
Five years' explorations in the fossil beds of Alberta.
Trans. Kansas Acad. Sci., xxviii, 205-211.

Sternberg, Charles M. 1921 A
A popular description of the dinosaurs.
Canad. Field-Naturalist, xxxv, 61-66.

—— 1921 B
A supplementary study of *Panoplosaurus mirus*.
Trans. Roy. Soc. Canada (3), xv, sec. iv, 93-102, pls. i, ii.

—— 1924 A
Notes on the Lance formation of southern Saskatchewan.
Canad. Field-Naturalist, xxxiii, 66-70.

—— 1925 A
Integument of *Chasmosaurus belli*.
Canad. Field-Naturalist, xxxix, 108-110, 1 fig.

—— 1926 A
Notes on the Edmonton formation of Alberta.
Canad. Field-Naturalist, xl, 102-104.

—— 1926 B
A new species of *Thespesius* from the Lance formation of Saskatchewan.
Can. Geol. Surv. Bull., xliv (Geol. ser. xlvi), 73-84, pls. xv-xvii, 2 text-figs.

—— 1926 C
Dinosaur tracks from the Edmonton formation of Alberta.
Can. Geol. Surv. Bull., xliv (Geol. ser. xlvi), 85-87, pl. xviii, 1 text-fig.

Sternberg, Charles M.—Cont'd 1927 A
Horned dinosaur group in the National Museum of Canada.
Canad. Field-Naturalist, XLI, 67-73, 2 figs.

Sternfield, Richard 1909 A
Wie sahen die Riesenechsen (Dinosaurier) in Wirklichkeit aus?
Aus der Natur, V, 374-383, 11 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 293.

Stevenson, John J. 1876 A
Quaternary fossils.
Geol. Surv. Penn. (Second), 1875 K, Greene and Washington District, 22.

—— 1878 A
Report on the geology of Muskingum County, north of the Central Ohio railroad.
Geol. Surv. Ohio, III, pt. 1, 237-260.

—— 1907 A
Carboniferous of the Appalachian basin.
Bull. Geol. Soc. Amer., XVIII, 29-178.

Stevenson, W. G. 1884 A
Carcharodon carcharias — "man-eater" shark.
Trans. Vassar Bros. Inst., II, 83-92, pls. i, ii.

—— 1884 B
The "man-eater shark," *Carcharodon carcharias.*
Amer. Naturalist, XVIII, 940, 941, pl. XXXI, 1 text-fig.

Stieda, L. 1897 A
Ueber die Homologie der Brust- und Becken-Gliedmassen des Menschen und der Wirbeltiere.
Anat. Hefte, Arb. VIII, 501-704, pl. lix.
There is a bibliography of 69 titles.

Stingelin, Theodor 1902 A
Ueber ein im Museum zu Olten aufgestelltes Kranium von *Elephas primigenius* Blumenbach.
Abh. Schweiz. pal. Ges., XXIX, 1-9, pls. i, ii, 1 fig.

Stirrup, M. 1893 B
The true horizon of the mammoth.
Geol. Mag. (3), X, 334-336.

Stock, Chester 1913 A
Nothrotherium and *Megalonyx* from the Pleistocene of southern California.
Bull. Dept. Geol. Univ. Calif., VII, 341-358, 18 text-figs.
Abstracts in Sci. Progress, VIII, 637; Rev. crit. Paléozool., XX, 41; Geol. Zentralbl., XXI, 238.

Stock, Chester—Continued 1914 A
The systematic position of the mylodont sloths from Rancho La Brea.
Science (n.s.), XXXIX, 761-763.

—— 1914 B
Skull and dentition of the mylodont sloths of Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., VIII, 319-334, 6 text-figs.
Abstracts in Rev. crit. Paléozool., XX, 40; Geol. Zentralbl., XXIX, 475.

—— 1914 C
Systematic position of the mylodont sloths from Rancho La Brea (Abstract).
Bull. Geol. Soc. Amer., XXV, 143-144.

—— 1916 A
Pleistocene mammal fauna of Hawver Cave, a fissure deposit near Auburn, California. (Abstract of 1 line only.)
Bull. Geol. Soc. Amer., XXVII, 169.

—— 1917 A
Recent studies on the skull and dentition of *Nothrotherium* from Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., X, 137-164, 8 text-figs.
Abstract in Rev. crit. Paléozool., XXI, 88; Geol. Zentralbl., XXIX, 475.

—— 1917 B
Further observations on the skull structure of mylodont sloths from Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., X, 165-178, pls. iii, iv.
Abstract in Geol. Zentralbl., XXIX, 474.

—— 1917 C
Structure of the pes in *Mylodon harlani* (Abstract).
Bull. Dept. Geol. Univ. Calif., X, 267-286,
Abstract in Rev. crit. Paléozool., XXIV, 140, 10 text-figs.

—— 1917 D
Structure of the foot in *Mylodon harlani* and its bearing on the problem of supposed human origin of footprints occurring near Carson, Nevada.
Bull. Geol. Soc. Amer., XXVIII, 226-227 (Abstract).

—— 1917 E
Occurrence of *Nothrotherium* in Pleistocene cave deposits of California.
Bull. Geol. Soc. Amer., XXVIII, 233 (Abstract).

Stock, Chester—Continued 1918 A

The Pleistocene fauna of Hawver Cave.

Bull. Dept. Geol. Univ. Calif., x, 461-515, 32 text-figs.

This paper contains lists of species of mammals found in Hawver, Potter Creek, and Samwel Caves.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 171; Geol. Zentralbl., XXIX, 443.

Review in Rev. crit. Paléozool., XXVII, 35.

——— 1920 A

An early Tertiary vertebrate fauna from the southern coast ranges of California.

Bull. Dept. Geol. Univ. Calif., XII, 267-276, 6 text-figs.

——— 1920 B

A mounted skeleton of *Mylodon harlani.*

Bull. Dept. Geol. Univ. Calif., XII, 425-430, pl. li.

Abstract in Geol. Zentralbl., XXIX, 475.

——— 1920 C

Origin of the supposed human footprints of Carson City, Nevada.

Science (n.s.), LI, 514.

——— 1921 A

Later Cenozoic mammalian remains from the Meadow Valley region, southeastern Nevada.

Amer. Jour. Sci. (5), II, 250-264, figs. 1-9.

——— 1921 B

Note on an *Hipparion* tooth from the Siestan deposits of the Berkeley Hills, California.

Bull. Dept. Geol. Univ. Calif., XIII, 19-21, 1 fig.

Abstract in Geol. Zentralbl., XXIX, 473.

——— 1921 C

Description of *Megalonyx?* sp.

Bull. Dept. Geol. Univ. Calif., XII, 320-321, fig. 29.

A part of the paper Frick, C., 1921 A.

——— 1924 A

A recent discovery of ancient human remains in Los Angeles, California.

Science (n.s.), LX, 2-5.

——— 1924 B

Vertebrate fossils of the Mint Canyon formation (Upper Miocene) and Pico formation (Lower Pliocene), California.

Bull. U. S. Geol. Surv., DCCLIII, 54, 77.

Stock, Chester—Continued 1925 A

Cenozoic gravigrade edentates of western North America, with special reference to the Pleistocene Megalonychinæ and Mylodontidæ of Rancho La Brea.

Publ. Carnegie Instn. Wash., No. 331, i-xiii+1-206 pages, 47 pls., 120 text-figs.

The bibliography occupies pages 204-206.

——— 1926 A

Anchitheriine horses from the Fish Lake Valley region, Nevada.

Bull. Dept. Geol. Univ. Calif., XVI, 61-68, pl. xi, 1 text-fig.

——— 1926 B

Report on palæontological researches.

Publ. Carnegie Instn. Wash., Year Book, No. 25, 404-405.

——— 1927 A

Pleistocene fauna and flora [at Carpinteria, California].

Science (n.s.), LXVI, 155-156.

——— 1928 A

Note on fossil mammals at LaBrea.

Bull. Amer. Asso. Petrol. Geol., XII, 133.

———, and E. L. **Furlong** 1922 A

A marsupial from the John Day Oligocene of Logan Butte, eastern Oregon.

Bull. Dept. Geol. Univ. Calif., XIII, 311-317, 5 figs.

Abstracts in Rev. Géol. et Sci. conn., V, 121; in Rev. crit. Paléozool., XXVIII, 16, 1924; Geol. Zentralbl., XXIX, 475.

——— ——— 1926 A

New canid and rhinocerotid remains from the Ricardo Pliocene of the Mohave Desert, California.

Bull. Dept. Geol. Univ. Calif., XVI, 40-60, pls. vii-x.

——— ——— 1927 A

Skull and skeletal remains of a ruminant of the *Preptoceras-Eucera-therium* group from the McKittrick Pleistocene.

Bull. Dept. Geol. Univ. Calif., XVI, 409-434, pls. lx-lxiii, 5 text-figs.

——— ——— 1928 A

Occurrence of a Pleistocene elephant in Santa Rosa Island.

Geol. Soc. Amer. (Cordill. Sec.), 27th meet. Berkeley. List of papers with abstracts, 19.

Stöhr, Philipp 1880 A
Zur Entwicklungsgeschichte des Urodelenschädels.
Zeitschr. wiss Zool., XXXIII, 477-526, pls. xxix, xxx.
—— 1881 A
Zur Entwicklungsgeschichte des Anurenschädels.
Zeitschr. wiss. Zool., XXXVI, 68-103, pls. ii, iii.
—— 1882 A
Zur Entwicklungsgeschichte des Kopfskeletes der Teliostier.
Festschr. 3 säcularfeier A. J. Maxim., II, 71-93, pls. ii, iii.

Stolley, E. 1920 A
Beiträge zur Kenntnis der Ganoiden des deutschen Muschelkalks.
Palaeontogr., LXIII, 25-86, pls. x-xii.
Citations of the literature are found in foot-notes.

Stone, George H. 1899 A
The glacial gravels of Maine and their associated deposits.
Mon. U. S. Geol. Surv., XXXIV, i-xii+1-499 pages, pls. i-lii, 36 text-figs.

Stoner, Reginald C. 1913 A
Recent observations on the mode of accumulation of the Pleistocene bone deposits of Rancho La Brea.
Bull. Dept. Geol. Univ. Calif., VII, 387-393, pls. xvi-xxi.
Abstract in Geol. Centralbl., XX, 563.

Storch, Otto 1911 A
Untersuchungen über die paarige Afterflosse der Schleierschwänze.
Arb. zool. Inst. Wien, XIX, 195-218, 1 pl.
The bibliography presents 15 titles.

Storms, Raymond 1891 A
Notes sur l'ichthyologie fossile.
Bull. Soc. belge Géol., V, Proc. verb., 114-128, 142-157.
—— 1892 A
Sur le *Cybium* (*Enchodus*) *bleekeri* du terrain bruxellien.
Bull. Soc. belge Géol., VI, Mém., 1-12.
—— 1894 A
Troisième note sur les poissons du terrain rupélien.
Bull. Soc. belge Géol., VIII, Mém., 67-82, pl. vi.
—— 1896 A
Première note sur les poissons wemmeliens (Eocène supérieur) de la Belgique.
Bull. Soc. belge Géol., X, Mém., 198-240, pls. iii-vi.

Storms, Raymond—Continued 1901 A
Sur un "*Carcharodon*" du terrain bruxellien.
Bull. Soc. belge Géol., XV, Mém., 259-267, pl. vii.
Review in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 315.
—— 1910 A
Der Riesenalk.
Ber. Senckenb. naturf. Ges., XLI, 184-190, 2 pls.

Stose, George W. 1912 A
Description of the Apishapa [Col.] quadrangle.
Folio U. S. Geol. Surv., CLXXXVI, 1-12, 3 maps, 1 sheet of illustrations, 10 text-figs.

Stoss, Hanna 1921 A
Die Schlundzähne des Karpfens.
Zool. Jahrb. Anat., XLII, 411-434, pl. xviii, 9 text-figs.
There is a bibliography of 12 titles.

Strasser, Hans 1879 A
Zur Entwicklung der Extremitätenknorpel bei Salamandern und Tritonen.
Morphol. Jahrb., V, 240-315, pls. xvi-xix.
—— 1885 A
Ueber den Flug der Vögel.
Jena Zeitschr. Naturwiss., XIX (n.s. XII), 174-429, 33 figs.
—— 1905 A
Die Nicht-Homologie des Unterkiefers in der Wirbeltierreihe.
Anat. Anz. Ergänzungsh., XXVII, 139.
—— 1905 B
Zur Entwickelung und Pneumatisation des Taubenschädels.
Anat. Anz. Ergänzungsh., XXVII, 194-204. Also, Verh. Anat. Ges., XIX, 194-204.
—— 1905 C
Zur Entwickelung und Pneumatisation des Taubenschädels.
C. R. Assoc. Anatomistes, VII, 165-174.

Strasser, O. z. 1919 A
Ludwig Nick. * 11 Juni 1887, † 2 Sept. 1917.
Ber. Senckenb. naturf. Ges., XLIX, 132-135, with portrait.

Stratz-Haag, C. H. 1906 A
Die Abstammung des Menschen.
Ber. Senckenb. naturf. Ges., 1906, I, 90-92.

Strecker, Carl 1887 A
Ueber die Condylen des Hinterhauptes.
Arch. Anat. Physiol., 1887, 301-338.

Strecker, John K. 1915 A
Reptiles and amphibians of Texas.
Baylor Bull., XVIII, No. 4, 1-82.

Stremme, H. 1909 A

Demonstration der vorweltlichen Saurier.

Naturw. Wochenschr., XXIV (N.F. VIII), 504-505.

—— 1909 B

Wie ist *Diplodocus* richtig aufzustellen?

Naturw. Wochenschr., XXIV (N.F. VIII), 796-799, 2 figs.

—— 1910 A

Abels Neurekonstruction des *Diplodocus*.

Naturw. Wochenschr., XXV (N.F. IX), 545-550, 1 fig.

Review in Rev. crit. Paléozool., XVI, 230.

—— 1911 A

Die Säugetierfauna der Pithecanthropus-Schichten.

Centralbl. Min. Geol. Pal., 1911, 54-60, 83-89.

Makes comparison with the Pleistocene fauna of North America.

Strobel, P. 1875 A

Notizie preliminari su le balenoptere fossili subappennine del Museo parmense.

Bol. Com. geol. Ital., VI, 131-140.

Stromer, E. 1902 A

Die Wirbel der Land-Raubtiere, ihre Morphologie und systematische Bedeutung.

Zoologica, Heft XXXVI, i-viii+1-276 pages, 23 tables, pls. i-v.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 441-442; Geol. Zentralbl., VI, 54; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 124-125.

—— 1902 B

Über die Bedeutung des Foramen entepicondyloideum und des Trochanter tertius der Säugethiere.

Morphol. Jahrb., XXIX, 553-562, 2 text-figs.

Abstracts in Geol. Centralbl., VI, 53; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 121.

—— 1902 C

Ein Schädel und Unterkiefer von *Zeuglodon osiris* Dames.

Sitz.-Ber. Akad. Wiss. München, XXXII, 345-352, 1 fig.

Abstract in Geol. Centralbl., IV, 118.

—— 1903 A

Haifischzähne aus dem unteren Mokattam bei Wasta in Egypten.

Neues Jahrb. Min. Geol. Pal., 1903, I, 29-41, pl. i.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 150.

Stromer, E.—Continued 1903 B

Einiges über Bau und Stellung der Zeuglodonten.

Zeitschr. deutsch. geol. Ges., LV, Monatsb., 36-39, 1 text-fig.

—— 1903 C

Afrika als Entstehungszentrum für Säugetiere.

Zeitschr. deutsch. Geol. Ges., LV, Monatsb., 61-67.

Abstract in Geol. Centralbl., VI, 52.

—— 1903 D

Zeuglodon-Reste aus dem oberen Mitteleocän des Fajûm.

Zeitr. Pal. Geol. Oesterr.-Ung., XV, 1903, 65-100, pls. viii-xi, 1 text-fig.

For notice see Neues Jahrb. Min. Geol. Pal., 1905, I, 486-492. Abstracts in Geol. Centralbl., IV, 597; VI, 54.

—— 1904 A

Myliobatiden aus dem Mitteleocän der bayerischen Alpen.

Zeitschr. deutsch. Geol. Ges., LVI, 249-267, pl. xvi, 2 text-figs.

Abstract in Geol. Centralbl., VI, 239.

—— 1904 B

Ein Beitrag zur Kenntnis des Myliobatiden-Gebisses.

Zeitschr. deutsch. Geol. Ges., LVI, Br. Mitt., 203-207, 3 text-figs.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 158; Geol. Centralbl., VII, 729-730.

—— 1905 A

[Remarks on Edestidæ, *Helicoprion*, and *Campodus*.]

Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 132, 133.

—— 1905 B

Die Fischreste des mittleren und oberen Eocäns von Ägypten. I Teil: Die Selachier, A. Myliobatiden und Pristiden.

Beitr. Pal. Geol. Oesterr.-Ung., XVIII, 1905, 37-56, pls. v, vi.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 158.

—— 1905 C

Die Fischreste des mitteleren und oberen Eocäns von Ägypten. I Teil: Selachii, B. Squaloiden, und II Teil: Teleostomi, A. Ganoidei.

Beitr. Pal. Geol. Oesterr.-Ung., XVIII, 1905, 163-192, pls. xv, xvi.

Stromer, E.—Continued 1905 D

Review of R. H. Traquair's "Notes on *Drepanaspis gemündenensis* Schlüter" (Traquair, R. H., 1900 A).

Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 314-315.

—— 1905 E

Review of R. Storms's "Un *Carcharodon* du terrain bruxellien."

Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 315.

—— 1905 F

Review of O. P. Hay's "The chronological distribution of the elasmobranchs."

Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 477-478.

—— 1905 G

Review of Bashford Dean's "The preservation of muscle fibres in sharks of Cleveland shale" (Dean, B., 1902 D).

Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 478.

—— 1905 H

Die Zähne der niedersten und der geologisch ältesten Wirbeltiere.

Naturw. Wochenschr., XX, (N.F. IV), 214-216, 1 fig.

Abstract in Geol. Centralbl., VIII, 254.

—— 1906 A

Ueber die Bedeutung der fossilen Wirbeltiere Afrikas für die Tiergeographie.

Verh. deutsch. Zool. Ges., XVI, Marburg, 204-218.

Abstracts in Rev. crit. Paléozool., XI, 1; Geol. Centralbl., VIII, 568.

—— 1906 B

Neue Forschungen über das Mammut und seine Verwandten.

Korres.-Bl. deutsch. Ges. Anthrop., XXXVII, 48-50.

—— 1908 A

Die Urwale (*Archæoceti*).

Anat. Anz., XXXIII, 81-88, pl. i.

Abstracts in Geol. Centralbl., XII, 70; Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 119-121.

—— 1908 B

Die Archæoceti des ägyptischen Eozäns.

Beitr. Pal. Geol. Oesterr.-Ung., XXI, 1908, 106-178, pls. iv-vii.

There is a bibliography of 90 titles.

Abstract in Geol. Centralbl., XII, 69-70; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 162.

Stromer, E.—Continued 1910 A

Bemerkungen zur Rekonstruktion eines Flugsaurier-Skelettes.

Zeitschr. deutsch. Geol. Ges., LXII, Monatsb., 85-91.

Abstract in Geol. Centralbl., XV, 63; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 145.

—— 1910 B

Reptilien- und Fischreste aus dem marinen Alttertiär von Südtogo (Westafrika).

Zeitschr. deutsch. Geol. Ges., LXII, Monatsb., 478-507, 1 plate and 4 text-figs.

—— 1912 A

Lehrbuch der Paläozoologie. II Theil: Wirbeltiere.

8vo., i-vii+1-325 pages, 2 tables, 234 text-figs. Leipzig and Berlin: B. G. Teubner.

Abstracts in Zeitschr. Morph. Anthrop., XVII, 449; Geol. Centralbl., XVIII, 516-518; Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 157-158; Rev. crit. Paléozool., XVII, 1-4; Geol. Mag. (5), X, 37.

Review in Nature, XCIII, 265.

—— 1913 A

Rekonstruktionen des Flugsauriers *Rhamphorhynchus gemmingi* H. v. M.

Neues Jahrb. Min. Geol. Pal., 1913, II, 49-68, pls. iii-v.

Abstract in Natur. Wochenschr. (n.s.), XII (XXVIII), 1913, 761-763, figure.

—— 1915 A

Literatur über fossile Cetacea seit 1910.

Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 131-138.

—— 1915 B

Ergebnisse der Forschungsreisen Prof. E. Stromers in den Wüsten Ägyptens. II: Das Original des Theropoden *Spinosaurus*.

Abh. Bayer. Akad., XXVIII, art. 3, 1-32, pls. i-ii.

The bibliography presents 30 titles.

—— 1916 A

Die Entdeckung und die Bedeutung der Land und Süsswasser bewohnenden Wirbeltiere im Tertiär und in der Kreide Aegyptens.

Zeitschr. deutsch. Geol. Ges., LXVIII, 397-425.

The bibliography comprises 51 titles.

Stromer, E.—Continued 1917 A

Ergebnisse der Forschungsreisen Prof. Stromers in den Wüsten Ägyptens.

Die Säge des Pristiden *Onchopristis*.

Abh. Bayer. Akad., XXVIII, art. 8, 1-21, 1 plate.

There are 38 titles in the bibliography.

Abstract in Geol. Zentralbl., XXIII, 283.

—— 1917 B

Die Säge des Pristiden *Onchopristis numidus* Haug sp. und über die Sägen der Sägehaie.

Sitz.-Ber. Akad. Wiss. München, 1917, 1*-2*.

—— 1920 A

Bemerkungen über die ältesten bekannten Wirbeltier-Reste.

Sitz-Ber. Akad. Wiss. München, 1920, 9-20.

The bibliography consists of 33 titles.

Abstract in Rev. crit. Paléozool., XIV, 47; Geol. Zentralbl., XXV, 232.

—— 1921 A

Untersuchung der Hüftbeine und Hüftgelenke von Sirenia und Archæoceti.

Sitz-Ber. Akad. Wiss. München, 1921, 41-59, 6 text-figs.

There is a bibliography of 24 titles.

Abstracts in Geol. Zentralbl., XXVI, 314; Neues Jahrb. Min. Geol. Pal., 1923, I, 325-326.

—— 1923 A

Discussion on pachyosteosis.

Palaeont. Zeitschr., V, 258, 259.

—— 1924 A

Beobachtungen über die Schmelzstructur der Säugetiere, besonders der Hyracoidea und Multituberculata.

Palaeont. Zeitschr., VI, 248-256, 5 figs.

In the bibliography are recorded 14 titles.

Abstract in Geol. Centralbl., XXXI, 317.

—— 1925 A

Ergebnisse der Forschungsreise Prof. E. Stromers in den Wüsten Ägyptens. 7: *Stomatosuchus inermis* Stromer, ein schwach bezahnter Krokodilier. 8: Ein Skelettrest des Pristiden *Onchopristis numidus* Haug sp.

Abh. Bayer. Akad., XXX, Abh. VI, 1-22, 1 double plate.

Bibliographies on pages 9 and 22.

Stromer, E.—Continued 1925 B

Der Rückgang der Ganoidfische von der Kreidezeiten.

Zeitschr. deutsch. Geol. Ges., LXXVII, 348-371.

The bibliography presents 56 titles.

Review in Neues Jahrb. Min. Geol. Pal., 1926, I, 77-79.

—— 1926 A

Reste Land- und Süsswasser-Bewohnender Wirbeltiere aus den Diamantfeldern Deutsch-Südwestafrikas.

Extract from Erich Kaiser's Die *Diamantwüste Südwestafrikas*, II, 107-153.

——, and B. **Peyer** 1917 A

Über rezente und triassische Gebisse von Ceratodontidæ.

Zeitschr. deutsch. Geol. Ges., LXIX, 1-80, pls. i-iv, 6 text-figs.

There are 52 titles in the bibliography.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1919, I, 111-112; Geol. Zentralbl., XXIV, 445.

Strong, E. A. 1872 A

Notes upon the fossil remains of the Lower Carboniferous limestone exposed at Grand Rapids, Mich.

Kent Scient. Inst. Misc. Papers, No. 3, 1-6.

Strong, R. M. 1921 A

The order, time, and rate of ossification of the vertebrate skeleton.

Anat. Record, XX, 203.

Struck, Wilhelm 1915 A

Die Befestigung der Zähne im Bereich der Wirbelthierreihe.

Deutsche Monatsschr. Zahnheilk., XXXIII, 135-143, 12 figs.

Strüver, Johannes 1864 B

Beschreibung des *Heterodontus phillipii* Bl. (*Cestracion phillipii Cuv.*), mit Rücksicht auf seine fossile Verwandten.

Nov. Act. Acad. Leop. Carol., XXXI, Abh., 1-32. pls. i. ii.

Struthers, J. 1885 C

On the rudimentary hind-limb of the Tay whale, *Megaptera longimana*.

Rep. Brit. Assoc. Adv. Sci., LIV, Montreal, 766.

Abstract of paper read at Montreal.

—— 1888 A

See Hay, O. P., 1902 A, p. 224.

For review of these papers, published in book form in 1889, see Ann. Mag. Nat. Hist. (6), V, 413-416.

Struthers, J.—Continued 1894 A

On the carpus of the Greenland right-whale compared with those of fin-whales.

Rep. Brit. Assoc. Adv. Sci., LXIV, Oxford, 684-685.

—— 1895 A

On the characters and some parts of the anatomy of a *Beluga* (*Delphinapterus leucas*).

Jour. Anat. Physiol. Lond., XXX, 124-156, pl. iv.

Studer, Th. 1901 A

Die prachistorischen Hunde in ihrer Beziehung zu den gegenwärtig lebenden Rassen.

Abh. Schweiz. pal. Ges., XXVIII, 1-137, pls. i-ix, 18 text-figs.

The bibliography comprises 142 titles.

—— 1906 A

Ueber südamerikanische Caniden des Naturhistorischen Museums in Bern.

Mitt. naturf. Ges. Bern, 1905 (1906), 23-57, 4 pls., 19 figs.

Abstract in Rev. crit. Paléozool., X, 11-12.

Stur, D. 1886 A

Vorlage des ersten fossilen Schädels von *Ceratodus* aus den obertriadischen Reingrabner Schiefern von Pölzberg nördlich bei Lunz.

Verh. geol. Reichsanst. Wien, 1886, 381-383.

Süppel, Rud. 1926 A

Zur Osteologie des Lama (*Auchenia lama*).

Anat. Anz., LXII, 97-109.

Suess, E. 1868 A

Neue Reste von *Squalodon* aus Linz.

Jahrb. geol. Reichsanst. Wien, XVIII, 287-290, pl. x.

Sundevall, Carl J. 1886 A

On the wings of birds.

Ibis (5), IV, 389-457, pls. x, xi.

From the original Swedish of the K. Vetensk. Akad. Handl., 1843, 303-384.

Reprinted in Oken's Isis, 1846; cols. 324-366.

Supino, Felice 1904 A

Il cranio dei Teleostei in rapporto al loro genere di vita.

Atti Accad. Lincei, Rev. (5), XIII, 625-631.

Sushkin, Peter P. 1896 A

Zur Anatomie und Entwickelungsgeschichte des Schädels der Raubvögel.

Anat. Anz., XI, 767-768.

Usually this author has spelled his name Suschkin.

Sushkin, Peter P.—Continued 1899 A

Beiträge zur Classification der Tagraubvögel mit Zugrundelegung der osteologischen Merkmale.

Zool. Anz., XXII, 500-518.

—— 1899 B

Zur Morphologie des Vogelskelets. I: Schädel von *Tinnunculus*.

Nouv. Mém. Soc. Nat. Moscou, XVI (XXI), liv. 2, 1-163, pls. i-vi.

—— 1900 A

Systematische Ergebnisse osteologischer Untersuchungen einiger Tagraubvögel.

Zool. Anz., XXIII, 269-277.

—— 1900 B

Weitere systematische Ergebnisse vergleichend-osteologischer Untersuchungen der Tagraubvögel.

Zool. Anz., XXIII, 522-528.

—— 1905 A

Zur Morphologie des Vogelskelets. Vergleichende Osteologie der normalen Tagraubvögel (Accipitres) und die Fragen der Classification. Teil I: Grundeinteilung der Accipitres. Teil II: Falken und ihre nächsten Verwandten.

Nouv. Mém. Soc. Nat. Moscou, XVI (XXI), liv. 4, 1-247, pls. i-iv, 56 text-figs.

Brief review in Ibis, VI, 1906, 208-209.

—— 1910 A

Veränderungen des primordialen Kiefer- und Hyoidapparates beim Uebergang von den Fischen zu den Tetrapoden.

Biol. Zeitschr. Moscou, I, 241-258, plate of 7 figs.

—— 1925 A

On the representatives of the Seymouriamorpha, supposed primitive reptiles, from the Upper Permian of Russia, and on their phylogenetic relations.

Occ. Papers Bost. Soc. Nat. Hist., V, 179-181, 6 figs.

—— 1925 B

Taxonomical results of studies of the Fringillidæ.

Bull. Brit. Ornith. Club, XLV, 36-39, 3 figs.

—— 1927 A

On the modifications of the mandibular and hyoid arches and their relations to the brain-case in the early Tetrapoda.

Palaeont. Zeitschr., VIII, 263-321, 39 figs.

The bibliography presents 26 titles.

Sutton, A. H. See **Romer** and **Sutton.**

Sutton, J. Bland 1884 A

Observations on the parasphenoid, the vomer, and the palato-pterygoid arcade.

Proc. Zool. Soc. Lond., 1884, 566-573, pls. liii, liv, 3 text-figs.

Swainson, W. 1837 A

On the natural history and classification of birds.

Vol. II, i-vi+1-398 pages, 338 figs.

—— 1838 A

The cabinet of natural history. Fishes, amphibians, and reptiles.

Vol. I, 1-368, figs. 1-95; Vol. II, 1-452, figs. 1-135.

Only a few references are here made to this work.

Swallow, G. C. 1858 A

Quaternary deposits of Missouri.

Proc. Amer. Assoc. Adv. Sci., XI, pt. II, 21-39.

Swarth, H. S. 1915 A

Guide to the exhibit of fossil animals from Rancho La Brea.

Los Angeles Mus. Hist. Sci. Publ., No. 1, 1-34, illustrated.

24 publications on the fossils found at La Brea are listed.

Swartz, Charles K. 1913 A

Vertebrata [of Upper Devonian of Maryland].

Maryland Geol. Surv. Middle and Upper Devonian, 700-701, pl. lxxiii.

Swingle, Walter F. 1925 A

Letter written in 1906 to Dr. Charles D. Walcott concerning a tibia of a ground-sloth found in San Francisco, in 1852.

Publ. Carnegie Instn. Wash., No. 331, 201-202.

Swinnerton, H. H. 1902 A

A contribution to the morphology of the teleostean head skeleton, based upon a study of the developing skull of the three-spined stickleback (*Gasterosteus aculeatus*).

Quart. Jour. Micr. Sci. (n.s.), XLV, 503-593, pls. xxviii-xxxi, 5 text-figs.

Review in Jahresb. Anat. Entwickl., VIII, pt. 3, 44-46.

Swinnerton, H. H.—Continued 1905 A

The changes and variations in the position of the pectoral fin during development.

Ann. Mag. Nat. Hist. (7), XV, 319-321, 2 figs.

—— 1905 B

A contribution to the morphology and development of the pectoral skeleton of teleosteans.

Quart. Jour. Micr. Sci. (n.s.), XLIX, 363-383, pl. xxiii, 3 text-figs.

There is a bibliography of 18 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 115.

—— 1911 A

The evolution of the function and structure of the fins in fishes.

Sci. Progress, V, 447-456, 15 figs.

—— 1925 A

A new catopterid fish from the Keuper of Nottingham.

Quart. Jour. Geol. Soc., LXXXI, 87-99, pls. vii, viii, 3 text-figs.

Symington, Johnson 1892 A

On the nose, the organ of Jacobson, and the dumb-bell shaped bone in the Ornithorhynchus.

Proc. Zool. Soc. Lond., 1891 (1892), 575-584, pls. xliii, xliv.

The bibliography presents 17 titles.

—— 1905 A

Observations on the cetacean flipper, with special reference to hyperphalangism and polydactylism.

Jour. Anat. Physiol. Lond., XL, 100-109, 2 text-figs.

Abstracts in Nature, LXXIII, 1906, 304; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 119.

Symonds, W. S. 1884 A

Fish-remains in the North American Silurian rocks.

Science (o.s.), IV, 159.

Szalay, Elemér L. 1902 A

Comparative Osteologie der Brust-Schulterapparate von *Anser fabalis* (Lath. 1823) und *neglectus* (Sushk. 1897), *Larus ridibundus* (1758) and *canus* (L. 1758).

Aquila, IX, 12-29, pls. i-iii.

Text in Hungarian and German.

Szily, Aurel 1907 A

Die einleitenden Vorgänge zur Bildung der knöchernen Flossenstrahlen in der Schwanzflosse bei der Forelle, zugleich ein Beitrag zur Phylogenese dieser Hartgebilde.

Anat. Anz., XXXI, 347-364, 8 figs.

There is a bibliography of 12 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 119-120.

Taets, Walter 1913 A

Untersuchungen am Schädel des Haushundes.

Arch. Naturges, LXXIX, Abt. A, 5-78.

There is a bibliography of 75 titles.

Talbot, Mignon 1911 A

Podokesaurus holyokensis, a new dinosaur from the Triassic of the Connecticut Valley.

Amer. Jour. Sci. (4), XXXI, 469-479, pl. iv, 6 text-figs.

Abstracts in Geol. Centralbl., XVII, 42; Neues Jahrb. Min. Geol. Pal., 1912, I, Ref., 138; Sci. Progress, VI, 571.

Review in Rev. crit. Paléozool., XVI, 5.

Tarapani, Helena 1909 A

Die Entwickelungsgeschichte des Hyobranchialskelettes von *Salamandra atrata* Laur. und *Triton alpestris* Laur.

Jena. Zeitschr. Naturwiss., XLV (N.F., XXXVIII), 59-110, pls. iv-ix.

There are 26 titles in the bibliography.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 76-80.

Tarr, Ralph 1909 A

Quaternary system [of the Watkins Glen-Catatonk quadrangle, N. Y.].

Folio U. S. Geol. Surv., CLXIX, 15-28 (Field edition, 111-201).

Taschenberg, Otto 1894 A

Bibliotheca Zoologica. II: Verzeichniss der Schriften über Zoologie welche in dem periodischen Werken enthalten und vom Jahre 1861-1880 selbständig erschienen sind. Mit Einschluss der allgemein-naturgeschichtlichen, periodischen und palaeontologischen Schriften.

4ter Band, i-iv+2761-3648 pages.

—— 1899 A

Same title as the preceding.

5ter Band, i-vii+3649-4708 pages.

Taylor, Frank B. 1908 A

The Champlain submergence and uplift, and their relation to the Great Lakes and Niagara Falls.

Rep. Brit. Assoc. Adv. Sci., LXVII, Toronto, 1907, 652-653.

Taylor, Frank B.—Continued 1915 A

The Pleistocene of Indiana and Michigan and the history of the Great Lakes.

Mon. U. S. Geol. Surv., LIII, 238-279, 281-301, 316-349, 358-518, with maps and figures.

The monograph is the joint work of Frank Leverett and Frank B. Taylor.

Taylor, Harden F. 1916 A

The structure and growth of the scales of the squeteague and the pigfish as indicative of life history.

Bull. U. S. Bur. Fish., XXXIV, 285-330. pls. 1-lix, 8 text-figs.

The important bibliography occupies pages 325-330.

Taylor, Jay L. B. 1921 A

Did the Indian know the mastodon?

Nat. Hist., XXI, 591-597, with illustrations.

Taylor, W. P. 1911 A

A new antelope from the Pleistocene of Rancho La Brea.

Bull. Dept. Geol. Univ. Calif., VI, 191-197, 6 text-figs.

Review in Rev. crit. Paléozool., XVI, 84.

Abstract in Geol. Centralbl., XVII, 38.

—— 1911 B

Mammals of the Alexander Nevada expedition of 1909.

Univ. Calif. Publ. Zool., VII, 205-307.

—— 1912 A

The beaver of west central California.

Univ. Calif. Publ. Zool., X, 167-169.

—— 1914 A

The problem of aquatic adaptation in the Carnivora, as illustrated in the osteology and evolution of the sea-otter.

Bull. Dept. Geol. Univ. Calif., VII, 465-495, 15 text-figs.

Abstracts in Rev. crit. Paléozool., XIX, 11; Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 242-243.

—— 1915 A

Outline of the history of the Castoridæ.

Bull. Geol. Soc. Amer., XXVI, 167 (Abstract).

—— 1916 A

The status of the beavers of western North America, with a consideration of the factors in their speciation.

Univ. Calif. Publ. Zool., XII, 413-495.

—— 1917 A

Notes on *Aplodontia*.

Jour. Wash. Acad. Sci., VII, 272.

Taylor, W. P.—Continued 1918 A
Revision of the rodent genus *Aplodontia.*
Univ. Calif. Publ. Zool., XVII, 435-504, pls. xxv-xxvi, 16 text-figs.
Pages 484-495 are occupied by the extensive bibliography.

Teilhard de Chardin, P. See **Chardin,** Teilhard de, P.

Teller, Edgar E. 1906 A
Notes on the fossil fish-spine, *Phlyctænacanthus telleri* (Eastman).
Bull. Wis. Nat. Hist. Soc. (n.s.), IV, 162-167, pls. i-v.

—— 1911 A
A synopsis of the type specimens of fossils from the Palaeozoic formations of Wisconsin.
Bull. Wis. Nat. Hist. Soc., IX, 170-271.
The list of fishes occupies pages 270-271.

Tentzel, W. E. 1698 A
Epistola de sceleto elephantino Tonnæ nuper effosso, ad Antonium Magliabechium.
Phil. Trans. Roy. Soc. Lond., XIX, 757-776.

Teppner, Wilfried 1914 A
Zur phylogenetischen Entwicklung der "protriunguiden Trionyciden" des Tertiärs und *Trionyx petersi* R. Hoernes var. *trifailensis* nov. var. aus dem Miocän von Trifail in Steiermark.
Centralbl. Min. Geol. Pal., 1914, 628-638.

Terra, Paul de 1911 A
Vergleichende Anatomie des menschlichen Gebisses und der Zähne der Vertebraten.
Jena, i-v+1-451 pages, 200 text-figs.
The bibliography (pages 388-441) presents about 3,000 titles.

Terry, Robert J. 1906 A
The nasal skeleton of *Amblystoma.*
Trans. Acad. Sci. St. Louis, XVI, 95-124, pls. ii-v.
There is a bibliography of 24 titles.

—— 1909 A
An observation on the development of the mammalian vomer.
Anat. Record, III, 525-529, with 2 figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 80.

—— 1917 A
The primordial cranium of the cat.
Jour. Morphol., XXIX, 281-408, pls. i-xiii.
There is a bibliography which comprises 85 titles.

Thacker, A. G. 1914 A
The extinct apes and their bearing upon the antiquity of the Hominidæ.
Sci. Progress, IX, 281-289.

—— 1922 A
The geological history of the Primates.
Sci. Progress, XVI, 595-607.

—— 1923 A
[Note on *Hesperopithecus.*]
Sci. Progress, No. 67, Jan. 1923, 383-385.

Thäter, K. 1910 A
Das Munddach der Schlangen und Schildkröten.
Morphol. Jahrb., XII, 471-518, pls. viii, ix, 38 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 82.

Thevenin, Armand 1905 A
Sur la découverte d'amphibiens dans le terrain houllier de Commentry.
C. R. Acad. Sci. Paris, CXLI, 1268-1269.

—— 1906 A
Amphibiens et reptiles du terrain houiller de France.
Ann. Paléont. Paris, I, 145-163, pls. x, xi, 13 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 310-311; Sci. Progress, III, 468; Rev. crit. Paléozool., XI, 14-16.

—— 1907 A
Review of J. C. Merriam's "Carnivora from the Tertiary formations of the John Day region."
Rev. crit. Paléozool., XI, 216.

—— 1907 B
Paléontologie de Madagascar. IV: Dinosauriens.
Ann. Paléont. Paris, II, 121-136, pls. xvii, xviii.

—— 1909 A
Les stades d'évolution des plus anciens quadrupèdes trouvés en France.
C. R. Acad. Sci. Paris, CXLIX, 1222-1227.

—— 1910 A
Les plus anciens quadrupèdes de France.
Ann. Paléont. Paris, V, 1-65, pls. i-ix, 36 text-figs.
Reviewed in Amer. Naturalist, XLV, 384; Rev. crit. Paléozool., XIV, 234.

—— 1911 A
Le *Dryosaurus* des phosphates de Tunisie.
Ann. Paléont. Paris, VI, fasc., III, 1-16, pls. i-iii, 10 text-figs.

Thilenius, G. 1897 A
Accessorische und echte Skeletstücke.
Anat. Anz., XIII, 483-490.

Thilo, Otto. 1879 A
Die Sperrgelenke an den Stacheln einiger Welse, des Stichlinges und des Einhornes.
Inaug.-Dissert. Univ. Dorpat, 1879, 1-22, 1 pl.

—— 1896 A
Die Umbildungen an den Gliedmassen der Fische.
Morphol. Jahrb., XXIV, 287-355, pls. vi-ix, 7 text-figs.
There is a bibliography of 26 titles.
Abstract in Biol. Zentralbl., XVII, 20-29.

—— 1896 B
Die Gliedmassen der Fische.
Korres.-Bl. Ver. Riga, XXXIX, 96-106.

—— 1897 A
Die Stacheln der Fische.
Verh. Ges. deutsch. Naturf., LXVIII, 1896, Frankfurt, 171-176.
See also Nerthus, Altoona, III, 96-97, 105-106, 123-124, 146-148, 160-162.

—— 1898 A
Die Körperformen der Fische und Seesäugetiere.
Korres.-Bl. Ver. Riga, XL, 138-146, 8 figs.

—— 1898 B
Ergänzungen zu meiner Abhandlung:
"Die Umbildungen an den Gliedmassen der Fische."
Morphol. Jahrb., XXVI, 81-90.

—— 1899 A
Ueber die Vorfahren der Schollen.
Korres.-Bl. Ver. Riga, XLII, 175-179.

—— 1900 A
Ueber die Lebensweise und den Körperbau der Fische.
Korres.-Bl. Ver. Riga, XLIII, 18-21.

—— 1900 B
Die Stacheln der Fische als Haftorgane.
Korres.-Bl. Ver. Riga, XLIII, 18-21.

—— 1901 A
Die Vorfahren der Schollen.
Bull. Acad. Sci. St. Pétersb., XIV, 315-350, pls. i, ii, 18 text-figs.
The bibliography presents 30 titles.

—— 1902 A
Die Umbildungen am Knochengerüste der Schollen.
Zool. Anz., XXV, 305-320, 18 figs.
The bibliography comprises 21 titles.

Thilo, Otto—Continued 1902 B
Die Vorfahren der Schollen.
Biol. Zentralbl., XXII, 717-728, 17 text-figs.
There is a bibliography of 17 titles.

—— 1903 A
Die Entstehung der Schwimmblasen.
Biol. Centralbl., XXIII, 528-540.
There is a bibliography of 12 titles.

—— 1908 A
Die Bedeutung der Weber'schen Knöchelchen.
Zool. Anz., XXXII, 777-789, 7 text-figs.

—— 1913 A
Verknöcherte Schwimmblasen.
Zool. Anz., XLI, 289-298, 6 figs.
The bibliography comprises 17 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 33.

—— 1920 A
Die Entstehung der Augenstellung bei den Schollen.
Zool. Anz., LI, 119-142, 12 figs.
In the bibliography are included 30 titles.

Thomas, A. O. 1921 A
Notes on a beaver tooth from the Pleistocene of Des Moines, Iowa.
Science (n.s.), LIV, 309.

Thomas, Lyell J. 1926 A
Ossification centers in the petrosal bone of the mouse.
Anat. Record, XXXIII, 59-68, 11 figs.
The bibliography includes 21 titles.

Thomas, Oldfield 1887 A
On the homologies and succession of the teeth in the Dasyuridæ, with an attempt to trace the history of the evolution of mammalian teeth in general.
Proc. Roy. Soc. Lond., XLII, 310-312.

—— 1888 C
Catalogue of the Marsupalia and Monotremata in the collection of the British Museum (Natural History).
i-xiii+1-401 pages, pls. i-xxvii.

—— 1895 A
An analysis of the mammalian generic names given in Dr. C. W. L. Gloger's "Naturgeschichte" (1841).
Ann. Mag. Nat. Hist. (6), XV, 189-193.

—— 1901 A
The generic names *Myrmecophaga* and *Didelphis*.
Amer. Naturalist, XXXV, 143-145.

—— 1902 A
The generic names of the peccaries, northern fur seal, and sea leopard.
Proc. Biol. Soc. Wash., XV, 153-156.

Thomas, Oldfield—Continued 1902 B
On the generic names *Notophorus, Alces, Dama,* and *Cephalotes,* with remarks on the "one-letter rule" in nomenclature.
Proc. Biol. Soc. Wash., xv, 197-198.

—— 1908 A
The missing premolar of the Chiroptera.
Ann. Mag. Nat. Hist. (8), i, 346-348.

—— 1908 B
The genera and sub-genera of the *Sciuropterus* group, with descriptions of three new species.
Ann. Mag. Nat. Hist. (8), i, 1-8.

—— 1911 A
On certain of the smaller S. American Cervidæ.
Ann. Mag. Nat. Hist. (8), xi, 585-589.

—— 1911 B
The mammals of the tenth edition of Linnæus; an attempt to fix the types of the genera and the exact bases and localities of the species.
Proc. Zool. Soc. Lond., 1911, i, 120-158.

—— 1914 A
On a remarkable case of affinity between animals inhabiting Guiana, W. Africa, and the Malay Archipelago.
Proc. Zool. Soc. Lond., 1914, pt. 2, 415-417.

—— 1915 A
The penis-bone, or baculum, as a guide to the classification of certain squirrels.
Ann. Mag. Nat. Hist. (8), xv, 383-387.

—— 1916 A
On the classification of the cavies.
Ann. Mag. Nat. Hist. (8), xviii, 301-303.

—— 1916 B
On the grouping of South American Muridæ that have been referred to *Phyllotis, Euneomys,* and *Eligmodontia.*
Ann. Mag. Nat. Hist. (8), xvii, 139-143.

—— 1918 A
The generic division of the hedgehogs.
Ann. Mag. Nat. Hist. (9), i, 193-196.

—— 1920 A
The method of taking the incisive index in rodents.
Ann. Mag. Nat. Hist. (9), iv, 289-291, 1 fig.

Thomas, Oldfield, and R. **Lydekker**—Continued 1898 A
Dentition of the manatee.
Proc. Zool. Soc. Lond., 1897 (1898), 814.

——, and G. S. **Miller** 1905 A
The generic names given by Frisch in 1775.
Ann. Mag. Nat. Hist. (7), xvi, 461-464.
Frisch's generic names are rejected.

Thompson, Alton Howard 1900 A
The phylogeny of the fifth tubercle of the lower second molar of man.
Brit. Jour. Dental Sci., xliii, 916-927.

—— 1906 A
Mutations and the evolution of man.
Trans. Kansas Acad. Sci., xx, 260-264.

Thompson, d'Arcy W. 1889 A
Faut-il associer les zeuglodontes aux cétacés?
C. R. Congr. Internat. Zool., i, Paris, 1889, 225-232, 10 text-figs.

—— 1899 A
On characteristic points in the cranial osteology of the parrots.
Proc. Zool. Soc. Lond., 1899, 9-46, 40 text-figs.

Thompson, W. H. 1886 A
A geological survey of Clinton County [Indiana].
Geol. Surv. Ind., xv, 154-159.

Thompson, William 1838 A
Upon the identity of Hunter's *Delphinus bidentatus,* Baussard's *Hyperoodon honfloriensis,* and Dale's bottle head whale.
Mag. Nat. Hist., ii, 221-223.

Thompson, Wyville 1865 A
Notes on Prof. Steenstrup's views on the obliquity of flounders.
Ann. Mag. Nat. Hist. (3), xv, 361-371, pl. xviii.

Thomson, Arthur 1902 A
The relation of structure and function as illustrated by the form of the lower epiphysial suture of the femur.
Jour. Anat. Physiol. Lond., xxxvi, 95-105, 3 text-figs.

Thomson, James 1872 A
On some dermal tubercles associated with fossil fish-remains.
Ann. Mag. Nat. Hist. (4), x, 66-67.

—— 1873 A
On the plagiostomous fishes of the Coal Measures, particularly *Orthacanthus dechenii.*
Trans. Geol. Soc. Glasgow, iv, 187-188.

Thomson, J. Stuart 1904 A

The periodic growth of scales in Gadidæ as an index of age.

Jour. Mar. Biol. Assoc. U. K. (n.s.), VII, 1-109, pls. i-viii.

There is a bibliography of 49 titles.

Thornton, Thomas R. 1900 A

Mammoth tooth and relics in Missouri.

Pop. Sci., XXXIV, 198-199.

Thorpe, Malcolm Rutherford 1920 A

New species of Oligocene (White River) Felidæ.

Amer. Jour. Sci. (4), L, 207-224, 4 figs.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 119; Geol. Zentralbl., XXVII, 28.

Review in Rev. crit. Paléozool., XXVII, 37.

—— 1921 A

John Day *Promerycochœri*, with descriptions of five new species and one new subgenus.

Amer. Jour. Sci. (5), I, 215-244, figs. 1-6.

Abstracts in Neues Jahrb. Min. Géol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 123; Geol. Zentralbl., XXVII, 29.

Review in Rev. crit. Paléozool., XXVII, 39.

—— 1921 B

Leptauchenia Leidy and *Cyclopidius* (*Pithecistes*) Cope, with descriptions of new and little known forms in the Marsh collection.

Amer. Jour. Sci. (5), I, 405-419, 6 figs.

There is a bibliography of 15 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 1923, 120; Geol. Zentralbl., XXVII, 30.

Review in Rev. crit. Paléozool., XXVII, 37.

—— 1921 C

Two new fossil Carnivora.

Amer. Jour. Sci. (5), I, 477-483, 5 figs.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 117; Geol. Zentralbl., XXVII, 508.

Review in Rev. crit. Paléozool., XXVII, 34.

—— 1921 D

John Day eporeodons, with descriptions of new genera and species.

Amer. Jour. Sci. (5), II, 93-111, figs. 1-15.

There is a bibliography of 15 titles.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 122; Geol. Zentralbl., XXVIII, 154; Neues Jahrb. Min. Geol. Pal., 1923, I, 317-318.

Review in Rev. crit. Paléozool., XXVII, 38.

—— 1921 E

Two new forms of *Agriochœrus*.

Amer. Jour. Sci. (5), II, 111-119, figs. 1-4.

The bibliography comprises 20 titles.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 121; Geol. Zentralbl., XXVIII, 154; Neues Jahrb. Min. Geol. Pal., 1923, I, 317-318.

Review in Rev. crit. Paléozool., XXVII, 38.

Thorpe, Malcolm Rutherford— Continued 1921 F

A newly mounted *Eporeodon*.

Amer. Jour. Sci. (5), II, 309-313, pl. i, 3 figs.

Abstracts in Rev. Géol. et Sci. conn., V, 113; in Rev. crit. Paléozool., XXVIII, 9, 1924; Geol. Zentralbl., XXVIII, 154; Neues Jahrb. Min. Geol. Pal., 1923, I, 317-318.

—— 1921 G

A new *Merycoidodon*.

Amer. Jour. Sci. (5), II, 334-342, 2 figs.

There is a bibliography of 15 titles.

Abstracts in Rev. Géol. et Sci. conn., III-112; in Rev. crit. Paléozool., XXVIII, 7, 1924; Geol. Zentralbl., XXVIII, 154; Neues Jahrb. Min. Geol. Pal., 1923, I, 319.

—— 1922 A

A new generic name for *Pliocyon marshi*.

Amer. Jour. Sci. (5), III, 97.

Proposes *Arœocyon*.

Abstract in Rev. Géol. et Sci. conn., V, 119; in Rev. crit. Paléozool., XXVIII, 14, 1924.

—— 1922 B

A new genus of Oligocene Hyænodontidæ.

Amer. Jour. Sci. (5), III, 276-287, 2 figs.

There are 19 titles in the bibliography.

Abstracts in Rev. Géol. et Sci. conn., V, 120-121; in Rev. crit. Paléozool., XXVIII, 15, 1924; Geol. Zentralbl., XXVIII, 153.

—— 1922 C

Oregon Tertiary Canidæ, with descriptions of new forms.

Amer. Jour. Sci. (5), III, 162-176, figs. 1-5.

The bibliography consists of 22 titles.

Abstract in Rev. Géol. Sci. conn., V, 116-117; in Rev. crit. Paléozool., XXVIII, 12, 1924; Geol. Zentralbl., XXVIII, 154.

—— 1922 D

Arœocyon, a probable Old World migrant.

Amer. Jour. Sci. (5), III, 371-377.

Abstracts in Rev. Géol. et Sci. conn., V, 119; in Rev. crit. Paléozool., XXVIII, 14, 1924; Neues Jahrb. Min. Geol. Pal., 1923, I, 311; Geol. Zentralbl., XXIX, 251.

—— 1922 E

Some Tertiary Carnivora in the Marsh collection, with descriptions of new forms.

Amer. Jour. Sci. (5), III, 423-455, figs. 1-12.

There are 45 titles in the bibliography.

Abstracts in Rev. Géol. et Sci. conn., V, 117-119, in Rev. crit. Paléozool., XXVIII, 12, 1924; Geol. Zentralbl., XXIX, 222.

Thorpe, Malcolm Rutherford—Continued 1923 A

Notes on the Bridger (Eocene) Carnivora.

Amer. Jour. Sci. (5), v, 23-39.
Abstract in Geol. Zentralbl., xxix, 251.

—— 1923 B

New species of Uinta Carnivora from White River, Utah.

Amer. Jour. Sci. (5), v, 218-224, figs. 1-4.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1924, i, 124; Geol. Zentralbl., xxix, 350.

—— 1923 C

The hyoid apparatus of *Merycoidodon.*

Amer. Jour. Sci. (5), v, 225-229, fig. 1.
Abstracts in Geol. Zentralbl., xxix, 350; xxx, 350.

—— 1923 D

New reconstructions in the Yale Peabody Museum.

Amer. Jour. Sci. (5), vi, 91-99.
Abstract in Geol. Zentralbl., xxx, 442; Nature, cxxii, 522.

—— 1923 E

The primitive and carnivore-like characters of the Merycoidodontidæ.

Amer. Jour. Sci. (5), vi, 239-246.
Abstract in Geol. Zentralbl., xxx, 538.

—— 1924 A

Additional notes on *Oreodontoides oregonensis* Thorpe.

Amer. Jour. Sci. (5), vii, 316-318, 3 figs.
Abstract in Geol. Zentralbl., xxxi, 416.

—— 1924 B

White River (Oligocene) eporeodons.

Amer. Jour. Sci. (5), vii, 219-226.
Abstract in Geol. Zentralbl., xxxi, 415.

—— 1924 C

A new species of extinct peccary from Oregon.

Amer. Jour. Sci. (5), vii, 393-397, 4 figs.
The bibliography comprises 14 titles.
Abstract in Geol. Zentralbl., xxxi, 415.

—— 1924 D

The generic distinctions between *Merycochœrus* Leidy and *Promerycochœrus* Douglass.

Amer. Jour. Sci. (5), vii, 121-131.
Abstract in Geol. Zentralbl., xxx, 350.

—— 1925 A

The geological history of the oreodonts.

Jour. Mamm., vi, 69-82, pls. vi, vii, 5 text-figs.

Thyng, F. W. 1906 A

Squamosal bone in tetrapodous Vertebrata.

Tufts Coll. Stud., ii, 35-73, pls. xxxix-xli, 20 text-figs.
The extensive bibliography occupies 68-73. See also Proc. Boston Soc. Nat. Hist., xxxii, 387-425, pls. xxxix-xli.
Abstract in Jahresber. Anat. Entwickl. (N.F.), xii, pt. 3, 78.

Tichomirow, A. 1885 A

Zur Entwicklung des Schädels bei den Teleostiern.

Zool. Anz., viii, 533-537.
In this paper the author's name is spelled Tichomiroff.

—— 1902 A

Zur näheren Kenntnis des *Equus przewalskii.*

Zool. Anz., xxv, 344-349, 2 text-figs.

Tilesius, Wilhelm Gottlieb 1815 A

De skeleto mammonteo sibirico ad maris glacialis littora anno 1807 effosso, cui præmissæ elephantini generis specierum distinctiones.

Mém. Acad. Sci. St. Pétersb., v, 406-513, pls. xi, xii.

Tilton, John L. 1910 A

The age of the terrace south of Des Moines, Iowa.

Science (n.s.), xli, 950 (Abstract).

—— 1911 A

The Pleistocene deposits in Warren County, Iowa.

Dissertation, University of Chicago, i-iv+ 1-43 pages, with figs.

—— 1915 A

The age of the terrace south of Des Moines, Iowa.

Proc. Iowa Acad. Sci. for 1915, xxii, 233-236, pls. xxvi, xxvii, 1 text-fig.

—— 1926 A

Permian vertebrates from West Virginia.

Bull. Geol. Soc. Amer., xxxvii, 239 (Abstract).

—— 1926 B

Permian vertebrates from West Virginia.

Bull. Geol. Soc. Amer., xxxvii, 385-394, 2 figs.

Tims, H. W. M. 1901 A

Tooth-genesis in the Caviidæ.

Jour. Linn. Soc. Zool., xxviii, 261-290, pl. xxvi, 7 text-figs.
Appended is a bibliography of 14 titles.

Tims, H. W. M.—Continued 1902 A
On the succession and homologies of the molar and premolar teeth in the Mammalia.
Jour. Anat. Physiol. Lond., XXXVI, 321-343.

—— 1903 A
The evolution of the teeth in the Mammalia.
Jour. Anat. Physiol. Lond., XXXVII, 131-149, 5 text-figs.

—— 1905 A
The development, structure, and morphology of the scales in some teleostean fish.
Quart. Jour. Micr. Soc. (n.s.), XLIX, 39-68, pl. vi.
There is a bibliography of 21 titles.

—— 1905 B
The dentition of mammals with reference to that of man.
Jour. Amer. Med. Assoc., XLV, 1784-1787, 11 figs.

—— 1908 A
Tooth-vestiges and associated mouth-parts in the Manidæ.
Jour. Anat. Physiol. Lond., XLII, 375-387, 14 text-figs.

—— 1911 A
Origin of mammals.
Nature, LXXXVIII, 294.

Tissandier, G. 1877 A
Reconstitution d'un mammouth fossile.
Bull. Assoc. Sci. France, XX, 139-141.

Todd, J. E. 1880 A
On the remains of an elephant found near Glenwood, Iowa.
Proc. Iowa Acad. Sci., 1875-1880, 14. Read Sept. 26, 1877.

—— 1889 A
Evidence that Lake Cheyenne continued till the Ice Age.
Proc. Amer. Assoc. Adv. Sci., XXXVII, Cleveland, 1888, 202-203.
Records finding of *Megalonyx* in Mills County, Iowa.

—— 1894 A
A preliminary report on the geology of South Dakota.
Bull. S. Dakota Geol. Surv., I, 1-172, with map.

—— 1896 A
Formation of the Quaternary deposits.
Geol. Surv. Missouri, X, 113-217.

Todd, J. E.—Continued 1899 A
The moraines of southeastern South Dakota and their attendant deposits.
Bull. U. S. Geol. Surv., CLVIII, 1-171, pls. i-xxvii, 31 text-figs.

—— 1900 A
New light on the drift in South Dakota.
Amer. Geologist, XXV, 96-105.

—— 1908 A
Preliminary report on the geology of the northwest-central portion of South Dakota.
Bull. S. Dak. Geol. Surv., IV, 13-76, 31 pls., Appendix A, 193-195.

—— 1918 A
Kansas during the Ice Age.
Trans. Kansas Acad. Sci., XXVIII, 33-47, with map.

Todd, T. Wingate 1922 A
Numerical significance in the thoracicolumbar vertebræ of the Mammalia.
Anat. Record, XXIV, 261-286.
The bibliography presents 20 titles.

Toepelmann, Walter C. 1916 A
Phytosaur remains from New Mexico.
Quart. Bull. Univ. Oklahoma (n.s.), No. CIII, 40-44, pls. i-iii, text-figs. 15, 16.

Törne, Oskar 1913 A
Über das knorpelige Accessorium der Vespertilionidenhand.
Morphol. Jahrb., XLV, 431-440, 5 figs.
The bibliography presents 10 titles.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 169.

Toldt, C. 1904 A
Der Winkelfortsatz des Unterkiefers beim Menschen und bei den Säugetieren und die Beziehungen der Kaumuskeln zu demselben.
Sitz.-Ber. Akad. Wiss. Berlin, CXIII, 43-108, pls. i-iii.

—— 1905 A
Der Winkelfortsatz des Unterkiefers beim Menschen und bei den Säugetieren und die Beziehungen der Kaumuskeln zu demselben.
Sitz.-Ber. Akad. Wiss. Wien, CXIV, 315-476, pls. i-iii, 18 text-figs.

Tolmachoff, I. P. 1924 A
On dinosaurs in northern Asia.
Amer. Jour. Sci. (5), VII, 489-490.

—— 1927 A
Note on the extinction of the mammoth in Siberia.
Amer. Jour. Sci. (5), XIV, 66-69.

Tomes, Charles S. 1874 A

On the existence of an enamel organ in an armadillo (*Tatusia peba*).

Quart. Jour. Micr. Sci. (n.s.), XIV, 44-48.

—— 1875 A

On the development of the teeth of the newt, the frog, and certain lizards.

Proc. Roy. Soc. Lond., XXIII, 93-95.

—— 1875 B

On the structure and development of the teeth of Ophidia.

Proc. Roy. Soc. Lond., XXIII, 95-96.

—— 1875 C

On the development of the teeth of fishes (Elasmobranchii and Teleostei).

Proc. Roy. Soc. Lond., XXIII, 362.

—— 1876 A

On the development of the fishes (Elasmobranchii and Teleostei).

Phil. Trans. Roy. Soc. Lond., CLXVI, 257-267, pl. xxxi.

—— 1876 B

On the development and succession of the poison-fangs of snakes.

Phil. Trans. Roy. Soc. Lond., CLXVI, 377-385, pl. xxxvii, 1 text-fig.

—— 1877 A

On the structure and development of vascular dentine.

Proc. Roy. Soc. Lond., XXVI, 43-47.

—— 1878 A

On the structure and development of vascular dentine.

Phil. Trans. Roy. Soc. Lond., CLXIX, 25-47, pls. iii-v.

—— 1898 B

Upon the structure and development of the enamel of elasmobranch fishes.

Phil. Trans. Roy. Soc. Lond., CXC, B, 443-464, pls. xvii, xviii.

There is a bibliography of 12 titles.

—— 1898 C

Upon Röse's proposed classification of the forms of dentine.

Anat. Anz., XIV, 343-348.

Refers to Röse, C., 1897 A.

—— 1900 A

Upon the development of the enamel in certain osseous fishes.

Phil. Trans. Roy. Soc. Lond., CXCIII, B, 35-46, pl. v.

Abstract in Proc. Roy. Soc. Lond., LXXVI 61-63.

There is a bibliography of 15 titles.

Tomes, Charles S.—Continued 1906 A

On the minute structure of the teeth of creodonts, with especial reference to their suggested resemblance to marsupials.

Proc. Zool. Soc. Lond., 1906, I, 45-58 text-figs. 12-25.

Abstract in Nature, LXXIII, 357.

Tonkoff, W. 1900 A

Zur Entwickelungsgeschichte des Hühnerschädels.

Anat. Anz., XVIII, 296-304, 1 text-fig.

Tornier, Gustav 1888 A

Die Phylogenese des terminalen Segmentes der Säugethier-Hintergliedmassen.

Morphol. Jahrb., XIV, 223-328, pls. xi, xii.

—— 1889 A

Giebt es ein Prähalluxrudiment?

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1889, 175-181, 1 fig.

Followed by a remark by Bardeleben.

—— 1891 A

Ueber den Säugetier-Praehallux. Ein dritter Beitrag zur Phylogenese des Säugetierfusses.

Arch. Naturges., LVII, I, 113-204, pl. vii.

—— 1894 A

Das Entstehen der Gelenkformen.

Verh. Anat. Ges., VIII, 95-101, 2 figs.

—— 1894 B

Ein zoophyletisches Entwicklungsgesetz.

Verh. Anat. Ges., VIII, 102-108.

—— 1903 A

Entstehn von Vorderfuss-Hyperdactylie bei *Cervus*-Arten.

Morphol. Jahrb., XXXI, 453-504, 11 text-figs.

—— 1908 A

Gibt es bei Wiederkäuern und Pferden einen Zehenatavismus?

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1908, 195-196.

—— 1909 A

Wie war der *Diplodocus carnegii* wirklich gebaut?

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1909, 193-209, pl. ii, 6 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 294; Nature, LXXXIII, 166; Sci. Progress, IV, 667.

Tornier, Gustav—Continued 1909 B

Ernstes und Lustiges aus Kritiken über meine *Diplodocus*-Arbeit.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1909, 193-209, pl. ii, 6 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, Ref., II, 294; Sci. Progress, IV, 667.

—— 1909 C

War der *Diplodocus* elefantenfüssig?

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1909, 536-557, 19 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 295; Geol. Centralbl., XV, 506; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 143; Sci. Progress, IV, 667.

—— 1910 A

Über und gegen neue *Diplodocus*-Arbeiten.

Zeitschr. deutsch. Geol. Ges., LXII, Monatsb., 536-576, 12 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 322-323; Geol. Centralbl., XVI, 218-219.

—— 1910 B

Bemerkungen zu dem vorhergehenden Artikel "*Diplodocus* und seine Stellung usw. von Fr. Drevermann."

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 402-406.

—— 1910 C

Die richtige Aufstellung der Rieseneidechse *Diplodocus carnegii* und ihrer Verwandten.

Naturw. Wochenschr., XXV (N.F., IX), 204.

—— 1913 A

Reptilia.

Handwörtebuch der Naturwissenschaften (Gustav Fischer, Jena), VIII, 315-337, 20 figs.

—— 1913 B

Reptilia (Paläontologie).

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena), VIII, 337-376, figs. 1-53.

There is an extensive bibliography.

Tornquist, A. 1897 A

Review of A. Gaudry's work entitled: "Essai de Paléontologie philosophique." Paris, 1896.

Zool. Centralb., IV, 1896, 680-685.

—— 1904 A

Ein *Rhadinichthys* aus dem Karbon Süd-Amerikas.

Zeitschr. deutch. Geol. Ges., LVI, 346-351, pls. XXXVI, XXXVII.

Totton, A. Knyvett 1914 A

The structure and development of the caudal skeleton of the teleostean fish, *Pleuragramma antarcticum*.

Proc. Zool. Soc., Lond., 1914, pt. 2, 251-261, pls. I, II.

Toula, F. 1896 A

Ueber neue Wirbelthierreste aus dem Tertiär Oesterreichs und Rumeliens.

Zeitschr. deutsch. Geol. Ges., XLVIII, 915-924, 3 figs.

—— 1902 A

Das Nashorn von Hundsheim. *Rhinoceros* (*Ceratorhinus* Osborn) *hundsheimensis* nov. form. Mit Ausführungen über die Verhältnisse von elf Schädeln von *Rhinoceros* (*Ceratorhinus*) *sumatrensis*.

Abh. geol. Reichsanst Wien, XIX, Heft 1, 1-92, pls. i-xii, 25 text-figs.

—— 1905 A

Über einen dem Thunfische verwandten Raubfisch der Congerienschichten der Wiener Bucht. (*Pelamycybium* ["*Sphyrænodus*"] *sinus vindobonensis* n. gen. et n. sp.).

Jahrb. geol, Reichsanst. Wien, LV, 51-84, pl. iii, 11 text-figs.

—— 1908 A

Ein Mammutfund von Wilsdorf bei Bodenbach in Böhmen.

Jahrb. geol. Reichsanst. Wien, LVIII, 267-280, pls. viii-x, 4 text-figs.

Presents many measurements of various parts of the skeleton.

——, and J. A. **Kail** 1885 A

Über einen Krokodil-Schädel aus den Tertiärablagerungen von Eggenburg in Niederösterreich.

Denk. Akad. Wiss. Wien., L, 299-356, 3 pls., 3 text-figs.

The extensive bibliography occupies pages 343-351.

Tourneux, F., and J. P. 1912 A

Base cartilagineuse du crâne et segment basilaire de la chorde dorsale, formations foetales de la voûte du pharynx chez les mammifères.

Jour. Anat. Physiol. Paris, XLVIII, 57-105, 33 figs.

There is appended a bibliography of 43 titles.

Townsend, Charles H. 1887 A

Notes on the natural history and ethnology of northern Alaska.

Capt. M. A. Healy, Report of the cruise of the Revenue Marine Steamer *Corwin* in the Arctic Ocean in the year 1885, 81-102, with plates.

Townsend, P. S. 1908 A

Appearance of tusks of *Elephas mastodonta,* etc.

Ann. N. Y. Acad. Sci., XVIII, 147, pl. v. Note and drawing by author made in 1817 and reproduced by E. O. Hovey.

Tozzer, Alfred M. 1916 A

Pre-Columbian representations of the elephant in America.

Nature, XCVI, 592.

Tracy, Henry C. 1920 A

The clupeoid cranium in its relation to the swimbladder diverticutum and the membranous labyrinth.

Jour. Morphol., XXXIII, 439-474, pls. I-V. There is a bibliography of 18 titles.

Traquair, Ramsay H. 1865 A

On the asymmetry of the Pleuronectidæ, as elucidated by an examination of the skeleton in the turbot, halibut, and plaice.

Trans. Linn. Soc. Lond., XXV, 263-296, pls. XXIX-XXXII.

Abstract in Zool. Record, II, 197-198.

—— 1865 B

Observations on the development of the Pleuronectidæ.

Proc. Roy. Phys. Soc. Edinb., III, 215-222.

—— 1870 A

On the cranial anatomy of *Polypterus.*

Jour. Anat. Physiol. Lond., V, 166-188, pl. iii.

—— 1872 A

On *Phaneropleuron andersoni* (Huxley) and *Uronemus lobatus* (Agassiz).

Jour. Roy. Geol. Soc. Ireland, XIII, 41-47, pl. v, 1 text-fig.

—— 1874 A

Structure of ganoid bone of *Ganorhynchus woodwardi* Traquair.

Quart. Jour. Micr. Sci. (n.s.), XIV, 211-212.

—— 1877 D

On new and little-known fossil fishes from the Edinburgh district.

Proc. Roy. Soc. Edinb., IX, 262-272, 275-282, 427-444.

—— 1878 B

On the genus *Ctenodus* (Agassiz).

Nature, XVIII, 483.

Traquair, Ramsay H.—Cont'd 1878 C

On the cranial osteology of *Rhizodopsis* and on some points in the structure of *Rhizodus.*

Proc. Roy. Soc. Edinb., IX, 444-445.

—— 1878 D

On the genus *Rhizodus.*

Proc. Roy. Soc. Edinb., IX, 657-660.

—— 1879 B

Fossil fishes from the Edinburghshire and Linlithgowshire oil shales.

Proc. Roy. Phys. Soc. Edinb., V, 113-128.

—— 1879 C

Evidence as to the predaceous habits of the larger Palæoniscidæ.

Proc. Roy. Phys. Soc. Edinb., V, 128-130.

—— 1880 A

The history of Scottish fossil ichthyology.

Proc. Roy. Phys. Soc. Edinb., V, 137-161.

—— 1888 B

See Hay, O. P., 1902 A, p. 229.

Abstract by Jaekel in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 327.

—— 1890 A

Abstract in Neues Jahrb. Min. Geol. Pal., 1890, II, Ref., 438-439.

—— 1890 G

Observations on some fossil fishes from the Lower Carboniferous rocks of Eskdale, Dumfriesshire.

Ann. Mag. Nat. Hist. (6), VI, 491-494.

—— 1890 H

On the fossil fishes found at Achanarras quarry.

Ann. Mag. Nat. Hist. (6), VI, 479-486, 4 figs.

—— 1893 E

Review of Fritsch's Fauna der Gaskohle (Fritsch, A., 1895 A).

Geol. Mag. (3), X, 175-178.

—— 1898 A

Notes on Palæozoic fishes. No. II.

Ann. Mag. Nat. Hist. (7), II, 67-70, pl. I.

—— 1898 B

On *Cladodus neilsoni* (Traquair), from the Carboniferous limestone of East Kilbride.

Trans. Geol. Soc. Glasgow, XI, 41-50, pl. IV.

Reprints may have been issued in 1897.

Reviewed in Neues Jahrb. Min. Geol. Pa., 1900, I, Ref., 464.

Traquair, Ramsay H.—Cont'd 1899 B

On a new species of *Cephalaspis*, discovered by the Geological Survey of Scotland, in the Old Red Sandstone of Oban.

Trans. Roy. Soc. Edinb., XXXIX, 591-593, 1 plate, 3 text-figs.

Issued separately Feb. 6, 1899.

—— 1899 C

On *Thelodus pagei* Powrie sp. from the Old Red Sandstone of Forfarshire.

Trans. Roy. Soc. Edinb., XXXIX, 595-602, pl. xxxix.

Abstracts in Neues Jahrb. Min. Geol. Pal., I, 1901, Ref., 504-505; Geol. Centralbl., I, 1901; Rev. crit. Paléozool., V, 63.

—— 1899 D

On a new species of *Dipterus*.

Geol. Mag. (3), VI, 97-99, pl. ii.

—— 1900 C

The bearings of fossil ichthyology on the problems of evolution.

Nature, LXII, 502-508.

Published also in Rep. Brit. Assoc. Adv. Sci., 70th meet., 768-783.

This is the same paper as Traquair, R. H., 1900 B.

—— 1901 A

The ganoid fishes of the British Carboniferous formations. Pt. I, No. 2: Palæoniscidæ.

Palaeontogr. Soc. Mon., vol. for 1901, 61-87, pls. viii-xviii, 1 text-fig.

Abstract in Geol. Centralbl., II, 512.

—— 1903 A

The Lower Devonian fishes of Gemünden.

Trans. Roy. Soc. Edinb., XL, 723-739, pls. i-vii, 3 text-figs.

Issued separately 1903; Pt. IV, including it, in 1905.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 148.

—— 1904 A

A monograph of the fishes of the Old Red Sandstone of Britain. Part II, No. 2: The Asterolepidæ.

Paleontogr. Soc. Mon., 1904, 91-118, pls. xix-xxvi, text-figs. 51-61.

A continuation of Traquair, R. H., 1894 C.

—— 1905 A

Notes on the Lower Carboniferous fishes of eastern Fifeshire.

Proc. Roy. Phys. Soc. Edinb., XVI, 80-86, pl. v.

Appeared in Geol. Mag. (4), 1901, 110-114, without figures.

Traquair, Ramsay H.—Cont'd 1905 B

Supplementary report on fossil fishes collected by the Geological Survey of Scotland in the Upper Silurian rocks of Scotland.

Trans. Roy. Soc. Edinb., XL, 879-888, pls. i-iii, 4 text-figs.

—— 1906 A

A monograph of the fishes of the Old Red Sandstone of Britain. Pt. II, No. 3: The Asterolepidæ.

Palaeontogr. Soc. Mon., 1906, 119-134, pls. xxvii-xxxi, text-fig. 6.

A continuation of Traquair, R. H., 1904 A.

—— 1907 A

The ganoid fishes of the British Carboniferous formations. Pt. I, No. 3: Palæoniscidæ.

Palaeontogr. Soc. Mon., vol. for 1907, 87-106, pls. xix-xxiii, 3 text-figs.

A continuation of Traquair, R. H., 1904 A.

—— 1908 A

Report on the fossil fishes collected by the Geological Survey of Scotland from shales exposed on the shore near Gullane, East Lothian.

Trans. Roy. Soc. Edinb., XLVI, 103-117, pls. i-ii, 2 text-figs.

Issued separately Dec. 21, 1907.

—— 1908 B

On fossil fish remains collected by J. S. Flett, M.A., D.Sc., from the Old Red Sandstone of Shetland.

Trans. Roy. Soc. Edinb., XLVI, 321-329, pls. i, ii, 3 text-figs.

Abstract in Geol. Centralbl., XII, 300.

—— 1909 A

The ganoid fishes of the British Carboniferous formations. Pt. I, No. 4: Palæoniscidæ.

Palaeontogr. Soc. Mon., vol. for 1909, 107-122, pls. xxiv-xxx, text-fig. 5.

A continuation of Traquair, R. H., 1907 A.

Abstract in Geol. Centralbl., XVI, 411.

—— 1911 A

Les poissons wealdiens de Bernissart.

Mém. Mus. Hist. nat. Belgique, VI, 1910, 1-65, pls. i-xii, 22 text-figs.

Abstracts in Science (n.s.), XXXV, 306; Jahrb. Min. Geol. Pal., 1911, II, 481-482; Geol. Mag. (5), IX, 84-86, 95.

Traquair, Ramsay H.—Cont'd 1911 B
The ganoid fishes of the British Carboniferous formations. Pt. I, No. 5: Palæoniscidæ.
Palaeontogr. Soc. Mon., vol. for 1910, 123-158, pls. xxxi-xxxv, 3 text-figs.
A continuation of Traquair, R. H., 1909 A.
Abstracts in Geol. Centralbl., xvi, 411; Sci. Progress, viii, 22.

—— 1912 A
The ganoid fishes of the British Carboniferous formations. Pt. I, No. 6: Palæoniscidæ.
Palaeontogr. Soc. Mon., vol. for 1911, 159-180, pls. xxxvi-xl, 5 text-figs.
A continuation of Traquair, R. H., 1911 B.
Abstract in Geol. Centralbl., xviii, 140.

—— 1914 A
The ganoid fishes of the British Carboniferous formations. Pt. I, No. 7: Palæoniscidæ.
Palaeontogr. Soc. Mon., vol. for 1913, 181-186, with index.
A continuation of Traquair, R. H., 1912 A.

—— 1914 B
The ganoid fishes of the British Carboniferous formations. Pt. I: Palæoniscidæ.
Palaeontogr. Soc. Mon., vol. for 1913, i-vi.
This includes only the title-page and the index of Traquair's work on the Palæoniscidæ.

T. R. D. 1889 A
Fossil shells and bones.
Amer. Jour. Sci. (3), xxxv, 1839, 380.

Tredgold, A. F. 1897 A
Variations of ribs in the Primates, with especial reference to the number of sternal ribs in man.
Jour. Anat. Physiol. Lond., xxxi, 288-302, 2 pages of figures.

Tretjakoff, D. 1925 A
Das Knochengewebe bei den Pleuronectiden und den Plectognathen.
Anat. Anz., lix, 379-387, 4 figs.
The bibliography includes 10 titles.

—— 1926 A
Die Zähne der Plectognathen.
Zeitschr. wiss. Zool., cxxvii, 619-644, 10 figs.
The bibliography consists of 12 titles.

Tristram, H. B. 1888 A
The polar origin of life considered in its bearing on the distribution and migration of birds.
Ibis (5), vi, 204-216.

Troedsson, Gustaf T. 1924 F
On crocodilian remains from the Danian of Sweden.
Lund, Univ. Arsskr. (N.F.), xx, No. 2, 1-75, pls. i-viii, 9 text-figs.

Troschel, F. H. 1853 A
Ueber *Heloderma horridum* Wieg.
Arch. Naturges., xix, Bd. 1, 294-315, pls. xiii, xiv.

Trouessart, E. L. 1878 A
Mémoire sur la distribution géographique des chiroptères comparée à celle des autres mammifères terrestres.
Ann. Sci. Nat. (6), viii, art. 12, 1-24.

—— 1892 A
The fiction of the American horse and the truth on this disputed point.
Science (o.s.), xx, 188-189.

—— 1897 A
Catalogus Mammalium tam viventium quam fossilium. Nova editio.
Berolini, 1897, 1-664, 8vo.
Contains the orders Primates, Prosimiæ, Chiroptera, Insectivora.
Pagination incorrectly given in Hay, O. P., 1902 A, page 230.

—— 1897 B
Abstract of J. L. Wortman's "The Ganodonta and their relationship to the Edentata. Psittacotherium, a member of a new and primitive suborder of the Edentata."
Rev. crit. Paléozool., i, 86-87.

—— 1898 B
Abstracts of Eastman, C. R., 1897 A, 1897 B, and 1897 C (Hay, O. P., 1902 A, p. 84).
Rev. crit. Paléozool., ii, 7, 8.

—— 1903 A
Réapparition du Grand Serpent de mer.
Rev. scient. Paris (4), xix, 305-306.

—— 1904 A
Catalogus Mammalium tam viventium quam fossilium. Quinquinale supplementum.
Berolini, 1904, i-iv; 1-546.
Contains the orders Bimana, Primates, Prosimiæ, Chiroptera, Insectivora, Carnivora, Pinnipedia, Rodentia.

—— 1905 A
Catalogus Mammalium tam viventium quam fossilium.
Quinquinale supplementum. Pages 547-929.
Contains the orders Ungulata, Sirenia, Cetacea, Edentata, Marsupialia, Allotheria and Monotremata.

Trouessart, E. L.—Continued 1906 A

La distribution géographique des animaux.

Le Naturaliste, XXVIII, 65-66, 210-213.

—— 1907 A

Sur les rapports des lémuriens fossiles de France avec ceux de Madagascar, et sur l'origine diphylétique des lémuriens actuels.

C. R. Soc. Biol., LXII, 125-127.

—— 1913 A

Le cheval existait-il en Amérique à l'epoque de la découverte du Nouveau Continent?

Rev. gén. Sci. Paris, XXIV, 725-729.

Troxell, Edward L. 1915 A

The vertebrate fossils of Rock Creek, Texas.

Amer. Jour. Sci. (4), XXXIX, 613-638, pl. ix, 24 text-figs.

Abstracts in Rev. crit. Paléozool., XXIV, 91-92; Geol. Zentralbl., XXV, 328.

—— 1915 B

A fossil ruminant from Rock Creek, Texas, *Preptoceras mayfieldi* sp. nov.

Amer. Jour. Sci. (4), XL, 479-482, 3 text-figs.

Abstract in Geol. Zentrabl., XXV, 271.

—— 1916 A

An early Pliocene one-toed horse, *Pliohippus lullianus* sp. nov.

Amer. Jour. Sci. (4), XLII, 335-348, 7 text-figs.

Abstracts in Bull. Geol. Soc. Amer., XXVII, 151-152; Geol. Zentralbl., XXV, 270.

—— 1916 B

Oligocene fossil eggs.

Jour. Wash. Acad. Sci., VI, 422-425, text-figs. 1-5.

Abstract in Geol. Zentralbl., XXV, 539.

—— 1917 A

Fossil hunting in Texas.

Scient. Monthly, IV, 81-89, figs. 1-9.

—— 1917 B

An Oligocene camel, *Pœbrotherium andersoni* n. sp.

Amer. Jour. Sci., XLIII, 381-389, figs. 1-6.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, 388; Geol. Zentralbl., XXV, 43.

—— 1917 C

An Oklahoma Pleistocene fauna.

Bull. Geol. Soc. Amer., XXVIII, 212-213 (Abstract).

Troxell, Edward L.—Continued 1920 A

A tiny artiodactyl, *Hypisodus alacer* sp. nov.

Amer. Jour. Sci. (4), XLIX, 391-398, 4 figs.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 123; Geol. Zentralbl., XXVIII, 154; Neues Jahrb. Min. Geol. Pal., 1923, I, 317-318.

Review in Rev. crit. Paléozool., XXVII, 41.

—— 1920 B

Entelodonts in the Marsh collection.

Amer. Jour. Sci. (4), L, 243-255, 361-386, 431-445, plate iii, text-figs.

The bibliography (pages 245-247) presents 35 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 1923, 122-123; Geol. Zentralbl, XXVII, 28; Nature, CVIII, 482.

Review in Rev. crit. Paléozool., XXVII, 40.

—— 1920 C

Review of Peterson's "The American diceratheres."

Amer. Jour. Sci. (4), L, 396-397.

—— 1921 A

The nature of a species in paleontology and a new kind of type specimen.

Jour. Geol. XXIX, 475-479.

—— 1921 B

The American bothriodonts.

Abstracts in Neues, Jahrb. Min. Geol. Pal., 1921, II, Ref., 388; Rev. Géol. et Sci. conn., IV, 1923, 122; Geol. Zentralbl., XXVII, 30.

Review in Rev. crit. Paléozool., XXVII, 39.

—— 1921 C

Palæolagus, an extinct hare.

Amer. Jour. Sci. (5), I, 340-348, figs. 1-20.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, II, Ref., 386; Rev. Géol. et Sci. conn., IV, 1923, 122; Geol. Zentralbl., XXVII, 30.

—— 1921 D

New amynodonts in the Marsh collection.

Amer. Jour. Sci. (5), II, 21-34, figs. 1-7.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 125-126; Neues Jahrb. Min. Geol. Pal., 1923, I, 314-316.

Review in Rev. crit. Paléozool., XXVII, 43.

—— 1921 E

New species of *Hyracodon*.

Amer. Jour. Sci. (5), II, 34-40, figs. 1-5.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 124-125; Neues Jahrb. Min. Geol. Pal., 1923, I, 314-316.

Review in Rev. crit. Paléozool, XXVII, 42.

Troxell, Edward L.—Continued 1921 F

Cænopus, the ancestral rhinoceros.

Amer. Jour. Sci. (5), II, 41-51, figs. 1-6.

Abstracts in Rev. Géol. et Sci. conn., IV, 1923, 124-125; Geol. Zentralbl., XXVII, 362; Neues Jahrb. Min. Geol. Pal., 1923, I, 314-316.

Review in Rev. crit. Paléozool., XXVII, 41.

——— 1921 G

A study of *Diceratherium* and the diceratheres.

Amer. Jour. Sci. (5), II, 197-208, figs. 1-6.

Abstracts in Rev. Géol. et Sci. conn., V, 115; in Rev. crit. Paléozool., XXVIII, 10, 1924; Geol. Zentralbl., XXVII, 184; Neues Jahrb. Min. Geol. Pal., 1923, I, 314-316.

——— 1922 A

Oligocene rodents of the genus *Ischyromys*.

Amer. Jour. Sci. (5), III, 123-130, 7 text-figs.

Abstracts in Rev. Géol. et Sci. conn., V, 115-116; in Rev. crit. Paléozool., XXVIII, 11, 1924; Geol. Zentralbl., XXVIII, 154.

——— 1922 B

The status of *Homogalax*, with two new species.

Amer. Jour. Sci. (5), III, 288-292, 4 figs.

Abstracts in Rev. Géol. et Sci. conn., V, 113-114; in Rev. crit. Paléozool., XXVIII, 8, 1924; Geol. Zentralbl., XXVIII, 155; Neues Jahrb. Min. Geol. Pal., 1923, I, 314.

——— 1922 C

Helaletes redefined.

Amer. Jour. Sci. (5), III, 365-370, 3 figs.

Abstracts in Rev. Géol. et Sci. conn., V, 114; in Rev. crit. Paléozool., XXVIII, 10, 1924; Neues Jahrb. Min. Geol. Pal., 1923, I, 313; Geol. Zentralbl., XXIX, 222.

——— 1922 D

Horned Eocene ungulates.

Amer. Jour. Sci. (5), IV, 31-37, figs. 1-5.

Abstracts in Rev. Géol. et Sci. conn., V, 114; in Rev. crit. Paléozool., XXVIII, 9, 1924; Geol. Zentralbl., XXIX, 251.

——— 1922 E

The genus *Hyrachyus* and its subgroups.

Amer. Jour. Sci. (5), IV, 38-48, pl. i. 5 text-figs.

Abstracts in Rev. Géol. et Sci. conn., V, 114; in Rev. crit. Paléozool., XXVIII, 9, 1924; Neues Jahrb. Min. Geol. Pal., 1923, II, 155; Geol. Zentralbl., XXIX, 251.

——— 1923 A

Review of Schlesinger on "Mastodonten der Budapester Sammlungen."

Amer. Jour. Sci. (5), V, 88-89.

Troxell, Edward L.—Continued 1923 B

Pauromys perditus, a small rodent.

Amer. Jour. Sci. (5), V, 155-156, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1924, I, 402; Geol. Zentralbl., XXIX, 156.

——— 1923 C

Diplolophus, a new genus of rodents.

Amer. Jour. Sci. (5), V, 157-159, 5 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1924, I, 402; Geol. Zentralbl., XXIX, 156.

——— 1923 D

The Eocene rodents *Sciuravus* and *Tillomys*.

Amer. Jour. Sci. (5), V, 383-396, 22 figs.

The bibliography presents titles of 10 papers.

Abstract in Geol. Zentralbl., XXX, 24.

——— 1923 E

The Apatemyidæ.

Amer. Jour. Sci. (5), V, 503-506, 6 figs.

——— 1923 F

A new marsupial.

Amer. Jour. Sci. (5), V, 507-510, 4 figs.

Review in Rev. crit. Paléozool., XXVIII, 167, 1924.

——— 1923 G

American rhinoceroses and the evolution of *Diceratherium*.

Bull. Geol. Soc. Amer., XXXIV, 134 (Abstract).

——— 1925 A

Thoracosaurus, a Cretaceous crocodile.

Amer. Jour. Sci. (5), X, 219-233, 6 figs.

——— 1925 B

The Bridger crocodiles.

Amer. Jour. Sci. (5), IX, 29-72, 22 text-figs.

There are 18 titles in the bibliography.

——— 1925 C

Hyposaurus, a marine crocodilian.

Amer. Jour. Sci. (5), IX, 489-514, 15 figs.

——— 1925 D

Mechanics of crocodile vertebræ.

Bull. Geol. Soc. Amer., XXXVI, 605-614, 6 figs.

——— 1926 A

Smilodectes or *Notharctus*.

Amer. Jour. Sci. (5), XI, 423-428, 3 figs.

True, F. W. 1884 A

A muskrat with a round tail.

Science (o.s.), IV, 34.

Describes *Neofiber alleni* new genus, new species.

——— 1884 B

On a new muskrat, *Neofiber alleni*, from Florida.

Proc. U. S. Nat. Mus., VII, 170-172.

True, F. W.—Continued 1904 A

The whalebone whales of the western North Atlantic, compared with those occurring in European waters, with some observations on the species of the North Pacific.

Smithson. Contrib. Knowl., XXXIII, i-vii+ 1-332 pages, 50 pls., 97 text-figs.

There is a bibliography of 92 titles.

—— 1905 A

Diagnosis of a new genus and species of fossil sea-lion from the Miocene of Oregon.

Smithson. Misc. Coll. (Quart), XLVIII, 47-49.

Abstracts in Geol. Centralbl., VIII, 372; Knowl. Scient. News, II, 230.

—— 1905 B

New name for *Pontoleon*.

Proc. Biol. Soc. Wash., XVIII, 253.

Proposes *Pontolis*.

—— 1905 C

The first discovery of fossil seals in America.

Science (n.s.), XXII, 794.

Abstract in Geol. Centralbl., VIII, 373.

—— 1906 A

Description of a new genus and species of fossil seal from the Miocene of Maryland.

Proc. U. S. Nat. Museum, XXX, 835-840, pls. lxxv, lxxvi.

Describes *Leptophoca lenis* and discusses the genera and species of extinct Phocidæ.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 439-440; Geol. Centralbl., XI, 379; Sci. Progress, I, 452; Rev. crit. Paléozool., X, 202.

—— 1907 A

Remarks on the type of the fossil cetacean *Agorophius pygmæus*.

Smithson. Instn. Publ. No. 1694, 1-8, pl. vi.

The plate illustrating this folio paper was prepared for Prof. Louis Agassiz, but was not published by him. It is entitled *Phocodon holmesii* Agass.

Abstract in Sci. Progress, II, 512.

—— 1907 B

Observations on the type specimen of the fossil cetacean *Anoplonassa forcipata* Cope.

Bull. Mus. Comp. Zool., LI, 95-106, pls. i-iii.

Abstracts in Sci. Progress, II, 512; Rev. crit. Paléozool., XIV, 5.

True, F. W.—Continued 1908 A

Remarks on the fossil cetacean *Rhabdosteus latiradix* Cope.

Proc. Acad. Nat. Sci. Phila., LX, 24-29, pl. vi, 3 text-figs.

Abstracts in Sci. Progress, III, 457; Rev. crit. Paléozool., XIV, 7; XV, 85.

—— 1908 B

On the classification of the Cetacea.

Proc. Amer. Philos. Soc., XLVII, 385-391.

—— 1908 C

The fossil cetacean *Dorudon serratus* Gibbes.

Bull. Mus. Comp. Zool., LII, 63-78, pls. i-iii, 2 text-figs.

Abstract in Rev. crit. Paléozool., XIV, 6.

—— 1908 D

On the occurrence of remains of fossil cetaceans of the genus *Schizodelphis* in the United States, and on *Priscodelphinus (?) crassangulum* Case.

Smithson. Misc. Coll. (Quart.), L, 449-460, pls. lix, lx.

Abstracts in Rev. crit. Paléozool., XIV, 4; XXI, 56; Sci. Progress, III, 458.

—— 1909 A

A further account of the fossil sea lion *Pontolis magnus* from the Miocene of Oregon.

U. S. Geol. Surv. Profess. paper LIX, 143-148, pls. xxi-xxiii.

Presents a list of the hitherto described species of sea lions.

—— 1909 B

Observations on living white whales, (*Delphinapterus leucas*) with a note on the dentition of *Delphinapterus* and *Stenodelphis*.

Smithson. Misc. Coll., LII, 325-330, pl. xxviii.

Abstract in Rev. crit, Paléozool., XIV, 5.

—— 1909 C

A new genus of fossil cetaceans from Santa Cruz territory, Patagonia; and description of a mandible and vertebræ of *Prosqualodon*.

Smithson. Misc. Coll., LII (Quart. Iss., V), 441-456, pls. xliii-xlv, 3 text-figs.

Abstract in Sci. Progress, IV, 664.

—— 1910 A

An account of the beaked whales of the family Ziphiidæ in the collection of the United States National Museum, with remarks on some specimens in other American museums.

Bull. U. S. Nat. Mus., LXXIII, 1-89, pls. i-xlii.

Abstracts in Amer. Jour. Sci. (4), XXX, 422; Nature, LXXXV, 116.

True, F. W.—Continued 1910 B

Description of a skull and some vertebræ of the fossil cetacean *Diochoticus vanbenedini* from Santa Cruz, Patagonia.

Bull. Amer. Mus. Nat. Hist., XXVIIII, 19-32, pls. i-v.

—— 1911 A

The origin of the porpoises of the family Delphinidæ.

Science (n.s.), XXXIII, 908.

—— 1911 B

Discovery of a fossil delphinoid cetacean, with tuberculate teeth.

Proc. Biol. Soc. Wash., XXIV, 37-38.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 132; Sci. Progress, VI, 564.

—— 1912 A

The genera of fossil whalebone whales allied to *Balæonoptera*.

Smithson. Misc. Coll., LIX, No. 6, 1-8.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 132; Sci. Progress, VIII, 9.

—— 1912 B

A fossil toothed cetacean from California, representing a new genus and species.

Smithson. Misc. Coll., LX, No. 11, 1-7, with pls. i, ii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 132; Sci. Progress, VIII, 9; Rev. crit. Paléozool., XXI, 56; Nature, XC, 418.

—— 1912 C

Description of a new fossil porpoise of the genus *Delphinodon* from the Miocene formation of Maryland.

Jour. Acad. Nat. Sci. Phila. (2), XV, 165-194, pls. xvii-xxvi.

Abstracts in Geol. Centralbl., XIX, 446; Neues Jahrb. Min. Geol. Pal., 1915, I, Ref., 132; Sci. Progress, VIII, 9-10.

—— 1912 D

Symposium on ten years progress in vertebrate paleontology. Marine mammals.

Bull. Geol. Soc. Amer., XXIII, 197-200.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, Williston, and Sinclair.

—— 1912 E

On the correlation of North American and European genera of fossil cetaceans.

Proc. internat. Zool. Congr., VII, Boston, 1907, 779-781.

True, F. W.—Continued 1913 A

Description of *Mesoplodon mirum*, a beaked whale recently discovered on the coast of North Carolina.

Proc. U. S. Nat. Mus., XLV, 651-657, pls. lii-lvii, 1 text-fig.

Abstract in Nature, XCII, 563.

Tschudi, Johann J. 1839 A

Classification der Batrachier, mit Berücksichtigung der fossilen Thiere dieser Abtheilung der Reptilien.

Mém. Soc. Sci. Nat. Neuchâtel, II, art. 3, 1-100, pls. i-vi.

Following the paper is an appendix written by Louis Agassiz.

Tukeman, H. 1899 A

The killing of the mammoth.

McClure's Mag., XIII, 504-514, 6 ills.

Fiction. See Lucas, F. A., 1900 A.

Tuomey, M. 1848 A

Report on the geology of South Carolina. Columbia, S. C.

Printed and published for the State. 4to., i-vi+1-293+i-lvi pages; geological map, 47 text-figs.

Contains lists of vertebrate fossils found in the Cretaceous, the Tertiary, and the Pleistocene; but usually determined only as to their genera.

—— 1850 B

First biennial report of the geology of Alabama. Tuskaloosa.

i-xxxii+1-176 pages.

Turnbull, Hubert 1909 A

The scales of salmon.

Field, CXIV, Dec. 11, 1094-1095, fig.; Dec. 18, 1119-1120; Dec. 25, 1175-1176.

Turner, H. N. 1847 A

Observations on the distinction between the cervical and dorsal vertebræ in the class Mammalia.

Proc. Zool. Soc. Lond., 1847, XV, 110-114, 2 figs.

Also in Froriep's Notizen, VIII, col. 177-180.

—— 1850 B

Contributions to the anatomy of the tapir.

Proc. Zool. Soc. Lond., XVIII, 102-106.

Turner, Henry Ward 1895 A

Auriferous gravels of the Sierra Nevada.

Amer. Geologist, XV, 371-379.

—— 1906 A

The Terlingua quicksilver deposits.

Econom. Geol., I, 265-281, text-figs. 16-18.

Turner, W. 1870 A

On the species of seal found in Scotland in beds of glacial clay.

Jour. Anat. Physiol. Lond., IV, 260-270.

—— 1870 B

On the sternum and ossa innominata of the Longniddry whale.

Jour. Anat. Physiol. Lond., IV, 271-281.

—— 1871 A

On the so-called two-headed ribs in whales and in man.

Jour. Anat. Physiol. Lond., V, 348-361, 3 text-figs.

—— 1871 B

On the transverse processes of the seventh cervical vertebra in *Balænoptera sibbaldii*.

Jour. Anat. Physiol. Lond., V, 361-362.

—— 1872 A

Jour. Anat. Physiol. Lond., VII, 75-79.

Wrongly credited in Hay, O. P., 1902 A, page 231, to Turner, H. N., jr.

—— 1873 A

Jour. Anat. Physiol. Lond., VIII, 133-134.

Credited in Hay, O. P., 1902 A, page 231, to Turner, H. N., jr.

—— 1876 A

Jour. Anat. Physiol. Lond., X, 516.

Credited in Hay, O. P., 1902 A, page 231, to Turner, H. N., jr.

—— 1880 A

Report on the bones of Cetacea collected during the voyage of H. M. S. *Challenger* in the years 1873-1876.

Chall. Rep. Zool., I, pt. 4, 1-45, pls. i-iii.

—— 1882 A

A specimen of Sowerby's whale (*Mesoplodon bidens*) captured in Shetland.

Jour. Anat. Physiol. Lond., XVI, 458-470.

Presents measurements and notes on the osteology.

—— 1882 B

A specimen of Rudolphi's whale (*Balænoptera borealis*, or *laticeps*) captured in the Firth of Forth.

Jour. Anat. Physiol. Lond., XVI, 471-484.

Presents measurements and notes on the osteology.

—— 1886 A

On the occurrence of the bottle-nosed, or beaked whale (*Hyperoodon rostratus*), in the Scottish seas, with observations on its external characters.

Proc. Roy. Phys. Soc. Edinb., IX, 25-47, 4 text-figs.

Turner, W.—Continued 1889 A

On the occurrence of Sowerby's whale (*Micropteron bidens*) in the Firth of Forth.

Proc. Roy. Phys. Soc. Edinb., X, 1-13, 1 text-fig.

—— 1889 B

Notes on the skull of an aged male *Hyperoodon rostratus* from Shetland.

Proc. Roy. Phys. Soc. Edinb., X, 19-23.

—— 1909 A

The skeleton of a Sowerby's whale (*Mesoplodon bidens*) stranded at St. Andrews, and the morphology of the manus in *Mesoplodon, Hyperoodon* and the Delphinidæ.

Proc. Roy. Soc Edinb., XXIX, 687-720, 11 text-figs.

Twenhofel, W. H. 1913 A

Arisaig.

Can. Geol. Surv. Guide book No. 1, pt. II, 288-312, with geological maps.

—— 1914 A

A new locality and horizon for Pennsylvanian vertebrates.

Science (n.s.), XL, 26-27.

——, and Carl O. **Dunbar** 1914 A

Nodules with fishes from the coal measures of Kansas.

Amer. Jour. Sci. (4), XXXVIII, 157-163.

Undetermined species of three genera mentioned.

Tyrrell, Joseph Burr 1892 A

Report on northwestern Manitoba, with portions of Assiniboia and Saskatchewan.

Rep. Geol. Surv. Canada, V (1890-91), pt. I, E, 1-235, with illustrations.

Ubaghs, C. 1888 A

Le crâne de la *Chelone hoffmanni*.

Bull. Soc. belge Geol., II, Proc.-verb., 452-454.

—— 1889 A

Le crâne de la *Chelone hoffmanni*.

Bull. Soc. belge Géol., II, Mém., 383-392, pls. x-xiii, 3 text-figs.

Udden, J. A. 1897 A

A brief description of the section of Devonian rocks exposed in the vicinity of Rock Island, Ill., with a statement of the nature of its fish remains.

Jour. Cincinnati Soc. Nat. Hist. XIX, 93-95.

Udden, J. A.—Continued 1899 A
Geology of Muscatine County [Iowa].
Iowa Geol. Surv., 1898, IX, 249-388, with maps.

—— 1901 A
Geology of Pottawattamie County [Iowa].
Iowa Geol. Surv. (1900), XI, 201-277.

—— 1901 B
Geology of Louisa County [Iowa].
Iowa Geol. Surv., XI, 57-126, with maps.

—— 1902 A
Geology of Jefferson County [Iowa].
Iowa Geol. Surv., XII, 357-437, with map.

—— 1902 B
Pleuroptyx in the Iowa Coal Measures.
Proc. Iowa Acad. Sci., IX, 121.
Abstract in Geol. Centralbl., V, 464.

—— 1903 A
Geology of Mills and Fremont Counties [Iowa].
Iowa Geol. Surv., XIII (1902), 125-183, with maps.

—— 1905 A
On the proboscidean fossils of the Pleistocene deposits in Illinois and Iowa.
Augustana Lib. Publ., No. 5, 47-57.
Abstract in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 306.

—— 1912 A
Geology and mineral resources of the Peoria quadrangle, Illinois.
Bull. U. S. Geol. Surv., DVI, 1-103, pls i-ix, figs. i-xvi.

Uhler, P. H. 1892 A
A study of Gay Head, Martha's Vineyard.
Trans. Maryland Acad. Sci., I, 204-212.

Uhlmann, Eduard 1921 A
Studien zur Kenntnis des Schädels von *Cyclopterus lumpus*, L.
Jena. Zeitschr. Naturwiss., LVII, 275-370, pls. xvi, xvii, 45 text-figs.
The bibliographies present nearly 100 titles.

Underhill, B. M. 1907 A
The evolution of the horse.
Proc. Delaware Co. [Penn.] Inst. Sci., II, 115-127, 2 figs.
Abstract in Geol. Centralbl., XII, 387.

—— 1910 A
A glance at the mammalian dawn.
Proc. Delaware Co. [Penn.] Inst. Sci., V, 75-87.

Underwood, Arthur S. 1910 A
An inquiry into the anatomy and pathology of the maxillary sinus.
Jour. Anat. Physiol. Lond., XLIV, 354-369, figs. 1-14.

Upham, Warren 1888 A
The geology of Crow Wing and Morrison Counties [Minnesota].
Final Rep. Geol. Surv. Minn., II, 580-611.
Mentions finding of tooth of *Otodus appendiculatus*.

—— 1895 A
The Glacial Lake Agassiz.
Mon. U. S. Geol. Surv., XXV, i-xxiv; 1-658; 38 plates.

—— 1895 B
Climatic conditions shown by North American interglacial deposits.
Amer. Geologist, XV, 273-295, pl. x.

—— 1902 A
Man in the Ice age at Lansing, Kansas, and Little Falls, Minnesota.
Amer. Geologist, XXX, 135-150, pls. ii, iii.

—— 1903 A
Valley loess and the fossil man of Lansing, Kansas.
Amer. Geologist, XXXI, 25-34.

—— 1903 B
The antiquity of the fossil man of Lansing, Kansas.
Amer. Geologist, XXXII, 185-187.

—— 1903 C
Primitive man and his stone implements in the North American loess.
Scient. Amer. Suppl., LV, 22678-22679.

—— 1905 A
Glacial lakes and marine submergence in the Hudson-Champlain valley.
Amer. Geologist, XXXVI, 285-289.

Usher, William 1854 A
Geology and palæontology, in connection with human origins.
J. C. Nott and Geo. R. Gliddon's *Types of Mankind*, 327-372, figs. 203-234.

Ussow, S. 1900 A
Zur Anatomie und Entwickelungsgeschichte der Wirbelsäule der Teleostier.
Bull. Soc. Natural. Moscou (n.s.), XIV *bis*, 175-240, pls. i-iv.
There is a bibliography of 51 titles.

Vacek, Michael 1877 A
Ueber österreichische Mastodonten und ihre Beziehungen zu den Mastodonarten Europas.
Abh. geol. Reichsanst. Wien, VII, Heft IV, 1-47, 7 plates.

Vacek, Michael—Continued 1877 B
Ueber Reste von Mastodon aus tertiären Ablagerungen Oesterreichs.
Verh. geol. Reichsanst., 1877, 52-53.

Vaillant, Léon 1863 A
Mémoire pour servir à l'histoire anatomique de la sirène lacertine.
Ann. Sci. nat. (4), XIX, 294-346, pls. vii-ix.

—— 1874 A
Sur les écailles de la ligne latérale chez différents poissons percoides.
C. R. Acad. Sci. Paris, LXXIX, 406-409.

—— 1877 A
Note sur la disposition des vertèbres cervicales chez quelques chéloniens.
Bull. Soc. Philom. Paris (7), I, 13-15.

—— 1877 B
Note sur la composition anatomique des battants du plastron fermant la carapace chez les cistudes et les cinosternes.
Bull. Soc. Philom. Paris (7), I, 36-38.

—— 1877 C
Remarques sur la classification et les affinités réciproques des chéloniens.
Bull. Soc. Philom. Paris (7), I, 54-58.

—— 1881 A
Mémoire sur la disposition des vertèbres cervicales chez les chéloniens.
Ann. Sci. nat. (6), X, art. 7, 1-106, pls. xxvi-xxxi.

—— 1896 A
Sur la structure histologique des rayons osseux chez la carpe (*Cyprinus carpio* Linn.).
C. R. Congr. internat. Zool., III, Leide, 1895, 275-278.

—— 1902 A
Sur la présence du tissue osseux chez certains poissons des terrains paléozoiques de Canyon City, Colorado.
C. R. Acad. Sci. Paris, CXXXIV, 1321-1322.
Brief notes on, in Geol. Centralbl., III, 121; LX, 727; Rev. crit. Paléozool., VII, 195.

—— 1903 A
Les Tortues de terre gigantesques.
Rev. Scient. (4), XIX, 705-715.

Valenciennes, A. 1822 A
Sur le sous-genre marteau, *Zygæna.*
Mém. Mus. hist. nat. Paris, IX, 222-228, pls. xi, xii.

Vallois, Henri V. 1921 A
Reconstitution de quelques muscles des dinosauriens ornithopodes.
C. R. Soc. Biol. 1921, II, 971-973.

Vallois, Henri V.—Continued 1921 B
La vertèbre diaphragmatique et la séparation des colonnes dorsale et lombaire chez les mammifères.
C. R. Soc. Biol., 1921, II, 974-975.
See also **Retterer** and **Vallois.**

Van Bambeke, C. 1868 A
Quelques remarques sur les squelettes de cétacés.
Bull. Acad. Sci. Belgique (2), XXVI, 20-61, 9 figs.

Van Bemmelen, J. F. 1901 A
Der Schädelbau der Monotremen.
Semon's Zool. Forschungsr., III, 731-798, pls. xxx-xxxii, 6 text-figs.
The bibliography comprises 111 titles.
Abstract in Neues Jahrb. Min. Geol. Pal., 1903, II, Ref., 283.

—— 1914 A
Convergence in mammals.
Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 524-525.

—— 1918 A
Androgenic origin of horns and antlers.
Proc. Akad. Wet. Amsterdam, XXI, 570-575.

Van Beneden, Pierre Joseph 1836 A
Observations sur les caractères spécifiques des grands cétacés, tirés de la conformation de l'oreille osseuse.
Ann. Sci. nat. (2), VI, 158-159.
See also C. R. Acad. Sci. Paris, III, 400, 401; also Edinb. New Philos. Mag., XXII, 1837, 198.

—— 1836 B
Os de l'oreille considéré comme ayant une valeur charactéristique dans les cétacés.
L'Institut, Paris, IV, 318.

—— 1853 A
Note sur la symétrie des poissons pleuronectes dan leur jeune age.
Ann. Sci. Nat. (3), XX, 340-342.

—— 1859 A
Sur la découverte d'ossements fossiles faite à Saint-Nicolas.
Bull. Acad. Sci. Belgique (2), VIII, 123-146.

—— 1861 B
Sur le développement de la queue des poissons plagiostomes.
Ann. Sci. nat. (4), XV, 124-128.
See also Hay, O. P., 1902 A, 232.

—— 1871 A
Sur les dents de lait de l'*Otaria pusilla.*
Bull. Acad. Sci. Belgique (2), XXXI, 61-67, 3 text-figs.

Van Beneden, P. J.—Continued 1883 A
Note sur des ossements de *Sphargis* trouvés dans la terre à briques du pays de Waas.
Bull. Acad. Sci. Belgique (3) VI, 1883, 665-684, with plate.
Describes *Sphargis rupeliensis.*

—— 1885 A
Description des ossements fossiles des environs d'Anvers.
Ann. Mus. hist. nat. Belgique, IX, 1-40, pls. i-xxx.
Part IV, describing *Plesiocetus.*

—— 1886 A
Description des ossements fossiles des environs d'Anvers.
Ann. Mus. hist. nat. Belgique, XIII, 1-139, pls. i-liii.
Part V: Describes the genera *Amphicetus, Heterocetus, Mesocetus, Idiocetus,* and *Isocetus.*

—— 1886 B
Sur quelques ossements de cétacés recueillis au pied du Caucase.
Bull. Acad. Sci. Belgique (3), XI, 281-283.

—— 1888 A
Histoire naturelle des balénoptères.
Mém. Cour. Acad. Belgique, 8vo., XLI, art. 1, 1-145.
Reviewed by Dollo in Rev. Quest. Sci., XXV, 326-337.

—— 1888 B
Les ziphioides des mers d'Europe.
Mém. Cour. Acad. Belgique, 8vo., XLI, art. 21, 1-119.
Reviewed by Dollo in Rev. Quest. Sci., XXV, 337-345.

Van Deinse, A. B. See **Deinse,** A. B. Van.

Van den Broeck, A. J. P. 1911 A
Über Geschlechtsunterschiede im Becken bei Primaten.
Arch. Anat. Physiol. Leipzig, 1911, 163-184, 21 text-figs.

—— 1911 B
Über das Os acetabuli bei Primaten.
Arch. Anat. Physiol. Leipzig, 1911, 185-206, 12 text-figs.

—— 1912 A
On the relation between the symphysis and the acetabulum in the mammalian pelvis and the signification of the cotyloid bone.
Proc. Acad. Wet. Amsterdam, XIV, 781-785.

Van den Broeck, A. J. P.—Continued 1914 A
Studien zur Morphologie des Primatenbeckens.
Morphol. Jahrb., XLIX, 1-118, pls. i-iv, 40 text-figs.

Van den Broeck, Ernst 1900 A
Les dépôts à iguanodons de Bernissart et leur transfert dans l'étage purbeckien ou aquilonien du Jurassique Supérieur.
Bull. Soc. belge Géol., XIV, Mem., 39-112.
For additional remarks on the same subject by the same author see volume XV of the Bulletin, Proc. Verb., 199-209.

—— 1902 A
Ce que doit signifier la spiral de *Helicoprion.*
Bull. Soc. belge Géol. (2), XIII, Pr. Verb., 215-218.

Van de Pas, Luis 1909 A
Un paso hacia adelante en el camino de la evolución del caballo.
An. Mus. Nac. Buenos Aires (3), X, 149-162, 7 text-figs.

Van der Klaauw, C. J. See **Klaauw,** C. J. van der.

Van de Wiele, C. 1902 A
Aperçu sur les vestiges fossiles d'édestidés et le nouvsau genre *Helicoprion.*
Bull. Soc. belge Géol. (2), XIII, 244-247, 1 fig.

—— 1903 A
Le mammouth du Musée de St. Pétersbourg.
Bull. Soc. belge Géol. (2), XVII, Pr.-verb., 593.

Van Gelderen, Chr. 1925 A
Die Entwicklung des Brustschulterapparats bei Sauriern.
Anat. Anz., LIX, 495-508, 4 figs.

Vanhöffen, Ernst 1891 A
Ueber die Ceratodusflosse.
Verh. Ges. deutsch. Naturf., LXIII, Bremen, 1890, Th. II, 134.

Van Ingen, G., and P. E. **Clark** 1903 A
Disturbed condition of fossiliferous rocks in the vicinity of Rondout, N. Y.
Bull. N. Y. State Mus. LXIX (Palæont.), 1176-1227, 13 pls.
Mentions occurrence of *Machæracanthus sulcatus.*

Van Kampfen, P. N. See **Kampfen,** P. N. van.

Van Oort, E. D. 1903 A

Ein Beitrag zur Kenntniss von *Halitherium* (Lendengegend, Becken und Zungenbeinkörper).

Samm. geol. Mus. Leiden (N.F.), II, Heft 3, 95-105, 1 pl., 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 191.

——— 1905 A

Notiz über *Halitherium.*

Centralbl. Min. Geol. Pal., 1905, 21-22.

Van Pée, P. 1903 A

Recherches sur le développement des extrémités chez *Amphiuma* et *Necturus.*

C. R. Assoc. Anatomistes, V, Liege, 37-42, 5 figs.

See also Verh. Anat. Ges., 1903, Heidelberg, 83-86.

——— 1904 A

Les membres chez *Amphiuma.*

Anat. Anz., XXIV, 476-482, 4 figs.

There is a bibliography of 8 titles.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), X, Abt. 3, 115; Jour. Roy. Micr. Soc., 1904, 641.

Van Rensselaer, J. 1827 B

Account of the discovery of an almost entire skeleton of the fossil mastodon.

Edinb. Jour. Sci., VII, 80-83.

Same as Van Rensselaer, 1826 A. Also in Edinb. Encyclop. XV, 721.

Van Straelen, Victor 1925 A

The microstructure of the dinosaurian egg-shells from the Cretaceous beds of Mongolia.

Amer. Mus. Novit., CLXXIII, 1-4, 2 figs.

Van Tuyl, Francis M. 1925 A

The stratigraphy of the Mississippian formations of Iowa.

Iowa Geol. Surv., XXX, 33-374, pls. i-vi, 16 text-figs.

Fish teeth are reported from many formations and localities, but are not further identified.

Van Wijhe, J. W. 1905 A

Die Homologie des Unterkiefers in der Wirbeltierreihe.

Anat. Anz. Ergänzungsh., XXVII, 17.

Brief remarks in discussion.

——— 1905 B

Ueber die Entwicklung des Kopfskeletts bei Selachiern.

C. R. Congr. internat. Zool., VI, Berne, 1904, 319-322.

Van Wijhe, J. W.—Continued 1907 A

On the existence of cartilaginous vertebræ in the development of the skull of birds.

Proc. Acad. Sci. Amsterdam, X, 14-17.

See also Versl. Wis. Nat. Afd. Wet., XV, 902-905.

——— 1922 A

Frühe Entwicklungsstadien des Kopf- und Rumpf-skeletts von *Acanthias vulgaris.*

Bijdr. Dierk. Amsterdam, XXII (Feestnum.), 271-298, pls. xi, 4 text-figs.

The bibliography comprises 33 titles.

Vaughan, T. Wayland 1902 A

Notes on Cuban fossil mammals.

Science (n.s.), XV, 148-149.

——— 1916 A

On reported Pleistocene human remains at Vero, Florida.

Jour. Geol., XXV, 40-42.

Reprints of this paper were distributed a few days before Jan. 1, 1917.

——— 1924 A

Criteria and status of correlation and classification of Tertiary deposits.

Bull. Geol. Soc. Amer., XXXV, 677-742, 3 tables.

Veatch, Arthur C. 1899 A

The Five Islands.

Rep. Geol. Surv. Louisiana, V, 209-262, pls. xix-xxxi.

An account of the rock salt region of Iberia and St. Mary's parishes of Louisiana.

——— 1902 A

The salines of north Louisiana.

Rep. Geol. Surv. Louisiana, VI, 41-100, pls. xi-xxiii, text-fig. 8.

——— 1902 B

The geography and geology of the Sabine River.

Rep. Geol. Surv. Louisiana, VI, 101-148, pls. xxiv-xxxvii, text-figs. 10-13.

——— 1902 C

Notes on the geology along the Ouachita.

Rep. Geol. Surv. Louisiana, VI, 149-172, pls. xxxviii, xxxix, 2 text-figs.

——— 1906 A

Geology and underground water resources of northern Louisiana and southern Arkansas.

U. S. Geol. Surv. Profess. Pap., XLVI, 1-422, pls. i-xlix, 33 text-figs.

Numerous references to the literature of the subjects discussed.

Veatch, Otto, and L. W. **Stephenson** 1911 A

Preliminary report on the geology of the coastal plain of Georgia.

Bull. Geol. Surv. Georgia, XXVI, 1-466, pls. i-xxx, 13 text-figs., a map of the Okefenokee swamp and a map of the coastal plain.

This bulletin was issued January 18, 1912.

Veit, Otto 1907 A

Über einige Besonderheiten am Primordialcranium von *Lepidosteus osseus*.

Anat. Hefte, Arb., XXXIII, 155-203, 12 text-figs.

The bibliography presents 12 titles. Abstract in Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 87-89.

—— 1911 A

Beiträge zur Kenntnis des Kopfes der Wirbeltiere. I: Die Entwickelung des Primordialcranium von *Lepidosteus osseus*.

Anat. Hefte, Arb., XLIV, 93-225, pls. A-C.

The bibliography presents 60 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 86-89.

—— 1916 A

Zur Theorie des Wirbeltierkopfes.

Anat. Anz., XLIX, 368-376.

In the bibliography are 13 titles.

—— 1924 A

Entwicklungsgeschichte und vergleichende Anatomie in ihren Wechselbeziehungen zueinander, erörtert an dem Problem des Wirbeltierkopfes.

Anat. Anz., LVIII, 374-393, 7 figs.

The bibliography presents 30 titles.

Veith, A. 1912 A

Beiträge zum Studium der Maxillarbezahnhung der Hippiden.

Arch. Naturges., LXXVIII, Abt. A, Heft. 5, 1-33, pls. i, ii.

On pages 31-33 is a bibliography of 72 titles.

Versluys, Jan 1898 A

Die mittlere und äussere Ohrsphäre der Lacertilia.

Zool. Jahrb. Anat., XII, 160-406, pls. x-xvii.

The bibliography occupies pages 391 to 395.

—— 1903 A

Entwicklung der Columella auris bei den Lacertiliern. Ein Beitrag zur Kenntnis der schalleitenden Apparate und des Zungenbeinbogens bei den Sauropsiden.

Zool. Jahrb. Anat., XIX, 107-188, pls. viii-xi, 10 text-figs.

Pages 351-356 are occupied by an extensive bibliography.

Versluys, Jan—Continued 1908 A

Parasphenoid bij *Dermochelys coriacea* Linn.

Tijdschr. Nederl. Dierk. Vereen. (2), X, Versl., xviii-xix.

Printed in Dutch.

—— 1909 A

Ein grosses Parasphenoid bei *Dermochelys coriacea* Linn.

Zool. Jahrb. Anat., XXVIII, 283-294, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, 81.

—— 1910 A

Bemerkungen zum Parasphenoid von *Dermochelys*.

Anat. Anz., XXXVI, 487-495.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 84.

—— 1910 B

Streptostylie bei Dinosauriern, nebst Bemerkungen über die Verwandtschaft der Vögel und Dinosaurier.

Zool. Jahrb. Anat., XXX, 175-260, pl. xii, 25 text-figs.

See Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 325-326; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 84-87, for abstracts.

—— 1910 C

Waren die sauropoden Dinosaurier Pflanzenfresser?

Zool. Jahrb. Syst., XXIX, 425-450, pl. xvii, 10 text-figs.

The bibliography comprises 32 titles.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 149-150; Sci. Progress, VI, 570.

—— 1911 A

Berichtigung zu Fuchs' Aufsatz: Bemerkungen über Monimostylie und Streptostylie.

Anat. Anz., XXXVIII, 137-144.

See Fuchs, H., 1910 B.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 89.

—— 1912 A

Über Streptostylie und ähnliche Zustände bei Sauropsiden, in Zusammenhang mit Bewegungen im Schädel.

Verh. internat. Zool.-Kongr., Graz, 1910, 490-503, 5 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 89.

Versluys, Jan—Continued 1912 B

Das Streptostylie-Problem und die Bewegungen im Schädel bei Sauropsiden.

Zool. Jahrb. Anat., Suppl. 15, II, 545-714, pl. xxxi, 77 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 263-266; Jahresber. Anat. Entwickl. (N.F.), XVIII, pt. 3, 111-116.

—— 1912 C

Amphibia.

Handwörterbuch der Naturwissenschaften (Gustav Fischer, Jena), I, 313-338, 23 figs.

—— 1914 A

On the phylogeny of the carapace, and on the affinities of the leathery turtle, *Dermochelys coriacea.*

Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 791-807, 9 text-figs.

—— 1914 B

Über die Phylogenie des Panzers der Schildkröten und über die Verwandtschaft der Lederschildkröte (*Dermochelys coriacea*).

Palaeont. Zeitschr., I, 321-347, 10 text-figs.

There is a bibliography of 37 titles.

Abstract in Geol. Zentralbl., XXV, 182.

—— 1919 A

Über die Phylogenie der Schläfengruben und Jochbogen bei den Reptilia.

Sitz.-Ber. Heidelb. Akad. Wiss., 1919. Abh. 13, 1-29, 19 figs.

—— 1922 A

Die Kaubewegungen von *Trachodon.*

Palaeont. Zeitschr., IV, 80-87; 92, 6 figs.

Abstract in Geol. Zentralbl., XXXII, 118.

—— 1922 B

Ueber die Rückbildung der Kiemenbogen bei den Selachii.

Bijdr. Dierk. Amsterdam, XXII (Feestnum. Max Weber), 95-105, 7 text-figs.

The bibliography comprises 63 titles.

—— 1922 C

Eine lebende Anosteiride, *Carettochelys insculpta* Ramsay.

Palaeont. Zeitschr., V, 97-99, 1 fig.

Abstract in Geol. Zentralbl., XXXII, 181.

—— 1923 A

Der Schädel des Skelettes von *Trachodon annectens* im Senckenberg Museum.

Abh. Senckenb. naturf. Ges., XXXVIII, 1-19, pls. i-iv, 2 text-figs.

There is a bibliography of 42 titles.

—— 1925 A

Remark on Muræniдæ.

Palaeont. Zeitschr., VII, 166.

Versluys, Jan—Continued 1925 B

Remarks on irreversibility in evolution.

Palaeont. Zeitschr., VII, 182.

Vettuch, C. 1803 A

Einige Bemerkungen über das Skelett des unbekannten Quadruped's vom Plata-Strome (*Megatherium americanum*).

Voigt's Mag. Naturk., V, 530-534, pl. xii.

Vialleton, L. 1916 A

Développement et fonctions des griffes de l'aile chez les oiseaux. Leur rôle probable chez l'*Archæopteryx.*

Ann. Mus. hist. nat. Marseille, XIV, Mém. No. 6, 1-26, 8 figs.

The bibliography comprises 19 titles.

—— 1917 A

Rapports ontogéniques des ceintures pelviennes et thoraciques chez les vértébrés tétrapodes.

C. R. Acad. Sci. Paris, CLXV, 190-192.

—— 1919 A

Epiphyses et cartilage de conjugaison des sauropsidés.

C. R. Acad. Sci. Paris, CLXIX, 306-308.

Vicq-d'Azyr, Felix 1792 A

Quadrupèdes.

Encyclop. Méthod. Syst. Anat., II, i-clxiv +1-632 pages.

—— 1819 A

Mammifères.

Encyclop. Méthod. Syst. anat., III, i-xxx +1-100 pages.

Vigliarolo, Giovanni 1891 A

Monografia dei *Pristis* fossili con la descrizione di una nuova specie del calcare miocenico di Lecce.

Atti Accad. Sci. Napoli (2), IV, Append. No. 3, 1-28, 1 pl.

Vigors, Nicholas A. 1825 A

Observations on the natural affinities that connect the orders and families of birds.

Trans. Linn. Soc. Lond., XIV, 395-517. Reprinted in Isis von Oken, 1827, cols. 924-958.

Villada, Manuel M. 1903 A

Apuntes acerca de la fauna fósil del Valle de Mexico.

An. Mus. Nac. Mexico, VII, 441-451, pls. i-viii.

Villiers, Cornelius G. S. de 1922 A

Neue Beobachtungen über den Bau und die Entwicklung des Brustschulterapparates bei den Anuren, insbesondere bei *Bombinator*.

Acta Zool., III, 153-225, 27 figs.

The bibliography presents 67 titles.

Virchow, Hans 1895 A

Ueber die Schwanzbildung bei Selachiern.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1895, 105-120.

—— 1907 A

Die Wirbelsäule des Löwen, nach Form zusammengesetzt.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1907, 43-69, 8 text-figs.

—— 1909 A

Die sagittale Flexion am Hinterhauptsgelenk von Säugetieren.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1909, 418-437, 9 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 91.

—— 1910 A

Die Wirbelsäule von *Ursus americanus* nach Form zusammengesetzt.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 10-19, 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 107.

—— 1910 B

Hand und Fuss des Elefanten, nach Form zusammengesetzt.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 77-87, 6 text-figs.

—— 1910 C

Über die sagittal-flexorische Bewegung im Hinterhauptsgelenk des Elefanten.

Sitz.-Ber. Ges. naturf. Freunde Berlin 1910, 131-135, 4 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVII, pt. 3, 90.

—— 1910 D

Ueber einen Fugenknochen im Epistropheus des Elefanten.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 251-253, 2 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 108.

—— 1910 E

Die Wirbelsäule von *Hydrochœrus capybara* nach Form zusammengesetzt.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 253-265, 1 text-fig.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 108.

Virchow, Hans—Continued 1910 F

Die sagittale Flexion am Hinterhauptsgelenk von Rind und Pferd.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 265-269, 2 text-figs.

—— 1910 G

Die Schneidezähne im Unterkiefer des Rindes nach Form eingesetzt.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1910, 269-273, 3 text-figs.

—— 1910 H

Die Wirbelsäule des abessinischen Nashorns (*Biceros bicornis*) nach Form zusammengesetzt.

Sitz.-Ber. Akad. Wiss. Berlin, 1910, 848-864, 9 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 107.

—— 1913 A

Wirbelsäule und Rotatoren der Bären.

Arch. Anat. Entwickl., 1913, 41-92, 20 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 130-133.

—— 1914 A

Mechanik der Wirbelsäule des *Varanus varius*.

Arch. Anat. Entwickl., 69-89, 10 text-figs.

—— 1914 B

Über die Alligatorwirbelsäule.

Arch. Anat. Entwickl., 1914, 103-143, 18 text-figs.

—— 1914 C

Ueber die Gelenkfortsätze der Wirbelsäule.

Anat. Anz. Ergänzungsh., XLVI, 129-136.

—— 1914 D

Modelle einiger functionell besonders charakteristischer Wirbelverbindungen.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1914, 318-323, 7 figs.

—— 1916 A

Die Wirbelsäule des Strausses.

Arch. Anat. Physiol. Leipzig, 1915 (1916), 212-244, 5 figs.

—— 1916 B

Bewegungsmöglichkeiten der Wirbelsäule des Flamingo.

Arch. Anat. Physiol. Leipzig, 1915 (1916), 245-254, 5 figs.

Virchow, Hans—Continued 1916 C

Über die Bewegungsmöglichkeiten an der Wirbelsäule und am Thorax des wilden Kaninchens.

Arch. Anat. Physiol. Leipzig, 1915 (1916), 255-264.

—— 1917 A

Über das Gebiss von *Didelphys cancrivora.*

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1917, 233-244, 6 figs.

—— 1917 B

Über das Fuchsgebiss.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1917, 321-337, 12 figs.

—— 1918 A

Über die Wirbelsäule des Kranichs.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1918, 105-132, 11 figs.

—— 1918 B

Über die Wirbelsäule des Bibers.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1918, 156-176, 7 figs.

—— 1919 A

Atlas und Epistropheus bei den Schildkröten.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1919, 303-332, 15 figs.

—— 1921 A

Zur Morphologie des Epistropheus.

Verh. Anat. Ges., LIV, 135-141, 6 figs.

—— 1926 A

Die Halswirbelsäule der Schildkröten.

Verh. Anat. Ges., XXXV, 214-221, 9 figs.

Virlet d'Aoust, Théodore, 1865 A

Coup d'oeil général sur la topographie et la géologie du Mexique et de l'Amérique Centrale.

Bull. Soc. géol. France (2), XXIII, 14-50.

Vitali, Giovanni 1909 A

L'articolazione mandibolare negli anfibi nei rettili e negli uccelli.

Anat. Anz., XXXIV, 207-224, 12 figs.

References to the literature in footnotes.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 81.

Völker, Heinrich 1913 A

Über das Stamm-, Gliedmassen- und Hautskelet von *Dermochelys coriacea* L.

Zool. Jahrb. Anat., XXXIII, 431-552, pls. XXX-XXXIII, 3 text-figs.

The bibliography occupies pages 543-549.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 173-176.

Voeltzkow, A. 1899 A

Beiträge zur Entwicklungsgeschichte der Reptilien. Biologie und Entwicklung der äusseren Körperform von *Crocodilus madagascariensis* Grand.

Abh. Senckenb. naturf. Ges, XXVI, 1-150, pls. i-XXV, 18 text-figs.

Pp. 111-149 are occupied by the bibliography.

For a brief abstract see Geol. Centralbl., VII, 121.

——, and L. **Döderlein** 1901 A

Beiträge zur Entwicklungsgeschichte der Reptilien. III: Zur Frage nach der Bildung der Bauchrippen.

Abh. Senckenb. naturf. Ges., XXVI, 313-336, pls. XXX, XXXI, 1 text-fig.

Abstract in Geol. Centralbl., VII, 122.

Vogel, Richard 1909 A

Die Entwickelung des Schultergürtels und des Brustflossenskelettes der Forelle (*Trutta fario*).

Jena. Zeitschr. Naturwiss., XLV, 499-544, pls. XXXIX-XLI, 5 text-figs.

There is a bibliography of 27 titles.

Vogt, Carl 1854 A

Archegosaurus ist kein Batrachier, doch ein Amphibium.

Neues Jahrb. Min. Geogn. Geol., 1854, 676-677.

—— 1879 A

L'*Archæopteryx macroura*—Un intermédiaire entre les oiseaux et les reptiles.

Rev. Scient. Paris, XVII, 241-248, figs. 18-21.

Same address as Vogt, C., 1880 A, but in French.

Voit, Max 1909 A

Das Primordialcranium des Kaninchens unter Berücksichtigung der Deckknochen.

Anat. Hefte, Arb., XXXVIII, 1, 425-616, pls. XXXV-L.

There is a bibliography of 63 titles.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 82-86.

—— 1909 B

Ueber einige neuere Ergebnisse am Primordialcranium der Säugetiere.

Anat. Anz. Ergänzungsh., XXXIV, 139-147, 3 figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 69.

—— 1923 A

Über einige Befunde in der Gegend des Gelenkteiles des primordialen Unterkiefers der Wirbeltiere.

Verh. Anat. Ges., XXXIII, 68-77, 3 figs.

The bibliography presents 14 titles.

Volk, Ernest 1911 A

The archæology of the Delaware Valley.

Pap. Peabody Mus. Amer. Archæol., v, i-xvi+1-258 pages, 2 maps, 125 pls., 26 text-figs.

—— 1912 A

Early man in America. Thirty years of experience in searching for evidences of the antiquity of man in the Delaware Valley.

Amer. Mus. Jour., XII, 181-185, 3 figs.

Mentions finding bones of American bison in second deposit from top. Also "musk-ox" and "elk" bones in gravels.

Vollosovic, K. 1909 A

Excavation du mammouth de Sanga-Jurach.

Bull. Acad. Sci. St. Pétersb. (6), v, 437-458, 5 text-figs.

This paper is printed in Russian.

Volz, Wilhelm 1902 A

Proneusticosaurus, eine neue Sauropterygier-Gattung aus dem untersten Muschelkalk Oberschlesiens.

Palaeontogr., XLIX, 121-162, pls. xv, xvi, 29 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 98.

Voy, C. D. 1897 A

Geology of Santa Rosa Island.

Amer. Geologist, XX, 226-227.

Abstract of unpublished paper.

Vriese, Bertha 1908 A

Zur Anatomie der Patella.

Anat. Anz., XXXII, Ergänzungsh., 163-169.

Vrolik, W. 1850 A

Ueber das Becken des Braunfisches (*Delphinus*).

Arch. Anat. Physiol. Med., 1850, 597-601.

W. D. 1877 A

On the organization of the Ornithosauria.

Geol. Mag. (2), IV, 124-126.

A review of Seeley, H. G., 1876 A.

Wagner, George 1903 A

Observations on *Platygonus compressus* Le Conte.

Jour. Geol., XI, 777-782, 4 text-figs.

Abstract in Geol. Centralbl., VI, 425.

—— 1904 A

Notes on *Polyodon,* I.

Science (n.s.), XIX, 554-555.

Wagner, Johann Andreas 1837 A

Beschreibung eines neuentdeckten *Ornithocephalus,* nebst allgemeinen Bemerkungen über die Organisation dieser Gattung.

Abh. Bayer. Akad., II, 163-198, 1 plate.

This paper was probably published before 1837.

—— 1837 B

Osteographische Beiträge zur Kenntniss einiger südamerikanischer Vögel.

Abh. Bayer. Akad., II, 472-499.

—— 1841 A

Gruppirung der Gattungen der Nager in natürlicher Familien, nebst Beschreibung einiger neuen Gattungen und Arten.

Archiv Naturges., 1841, I, 111-129.

—— 1860 A

Die Griffelzähner (*Stylodontes*), eine neuaufgestellte Familie aus der Abtheilung der rautenschuppigen Ganoiden.

Gelehrte Anz. Bayer. Akad., L, cols. 81-99.

Wagner, Rudolf 1843 A

Lehrbuch der Anatomie der Wirbelthiere.

8vo., Leipzig, pages 1-296.

Has references to the author's "Icones zootomicæ" and to the works of other authors.

Waite, Edgar R. 1896 A

On the egg-cases of some Port Jackson sharks.

Jour. Linn. Soc. Zool., XXV, 325-336, pl. xii.

—— 1905 A

The osteology of the New Guinea turtle (*Carettochelys insculpta,* Ramsay).

Rec. Austral. Mus., VI, 110-118, pls. xxiv-xxvii, text-figs. 30-32.

Walcott, C. D. 1891 A

Discovery of fish remains in Lower Silurian rocks.

Amer. Jour. Sci. (3), XLI, 245.

Waldheim, Fischer de 1835 A

Notice sur des dents de requins et des coprolithes enfermées dans des pyromaques arrondies.

Bull. Soc. Natural. Moscou, VIII, 234-244, pl. vii.

Walker, Bryant 1898 A

Mollusca contemporaneous with the mastodon.

Nautilus, XI, 121-122.

Walkhoff, O. 1901 A

Der Unterkiefer der Anthropomorphen und des Menschen.

Biol. Centralbl., XXI, 582-585.

Abstract in Geol. Centralbl., VI, 238.

Wallace, Alfred R. 1864 A

Remarks on the value of osteological characters in the classification of birds.

Ibis (1), VI, 36-41.

—— 1876 A

The geographical distribution of animals.

New York, 1876, 8vo., vol. I ,i-xv+1-503; vol. II, i-ix+1-607; both with maps and illustrations.

—— 1894 A

The palæarctic and nearctic regions compared as regards the families and genera of their Mammalia and birds.

Nat. Sci., IV, 433-445.

Wallis, Wilson D. 1925 A

Do the characteristics of prehistoric human remains imply a common ancestry for man and apes?

Amer. Naturalist, LIX, 62-69.

Wallisch, Wilhelm 1906 A

Das Kiefergelenk.

Arch. Anat. Entwickl., 1906, 303-310, pl. xxiv.

—— 1922 A

Das Kiefergelenk.

Zeitschr. Anat. Entwicklungsges., Abt. I. LXIV, 533-542, 10 figs.

Walmsley, Thomas 1918 A

The reduction of the mammalian fibula.

Jour. Anat. Physiol. London, LII, 326-331.

Walther, J. 1882 A

Die Entwickelung der Deckknochen am Kopfskelett des Hechtes (*Esox lucius*).

Jena. Zeitschr. Naturwiss., XVI (N.F. IX), 59-87, pls. iii, iv.

Walther, Wilhelm G. 1922 A

Die Neu-Guinea-Schildkröte *Carettochelys insculpta* Ramsay.

Dissertation Ludwigs-Universitäts zu Giessen. 4to. Pp. i-ii+1-96, with pls, xvii-xxx. The bibliography presents 98 titles.

Wamich, P. 1913 A

Die Entwickelung des Wirbelkörpergelenkes der Vögel; ein Beitrag zur Sauropsidenfrage.

Arch. Naturges., LXXIX, Abt. A. H., 6, 1-35, pl. i.

The bibliography presents 104 titles.

Wanderer, K. 1910 A

Der erste Fund eines Moschusochsen im Diluvium des Königreiches Sachsen.

Abh. naturw. Ges. Isis, 1909 (1910), 79-85, pl. iii, 1 text-fig.

Abstract in Nature, LXXXIV, 211.

Wanless, Harold R. 1923 A

The stratigraphy of the White River beds of South Dakota.

Proc. Amer. Philos. Soc., LXXII, 189-269, pls. i-ix, 10 text-figs.

Ward, Henry A. 1866 A

Catalogue of casts of fossils.

Rochester, N. Y., 8vo., 1-228, numerous illustrations.

Warder, Robert B. 1872 A

Geology of Dearborn, Ohio, and Switzerland Counties [Indiana].

Geol. Surv. Ind., III, IV, 388-434.

Warren, J. C. 1848 A

Communication upon the subject of the mastodon.

Edinb. New Philos. Jour., XLIV, 144.

—— 1849 A

Geological position of the mastodon.

Proc. Bost. Soc. Nat. Hist., III, 111.

—— 1853 A

Remarks on *Mastodon giganteus* and *Elephas primigenius*.

Proc. Boston Soc. Nat. Hist., IV, 376-377. Incorrectly credited in Hay, O. P., 1902 A, p. 250, to Jeffries Wyman.

—— 1853 B

Remarks on *Felis smylodon*.

Proc. Boston Soc. Nat. Hist., IV, 256-258.

Wasmuth, Paul 1905 A

Die Hörner des *Dinoceras*.

Korres.-Bl. Ver. Riga, XLVIII, 61-63.

Abstract in Geol. Centralbl., IX, 227.

Waterhouse, G. R. 1839 B

On the crania of rodents belonging to the families of Caviidæ and Chinchillidæ.

Proc. Zool. Soc. Lond., VII, 61.

—— 1839 C

Distribution of the Rodentia.

Proc. Zool. Soc. London, XII, 172-177.

—— 1839 D

Observations on the Rodentia, with a view to point out the groups, as indicated by the structure of the crania, in this order of mammals.

Mag. Nat. Hist., III, 90-96, 184-188, 274-279, 593-600 with figs.

Waterhouse, G. R.—Continued 1841 A
On the skull of the North American badger, *Meles labradoria* of authors.
Trans. Zool. Soc. Lond., II, 343-348, pl. lix.

—— 1841 B
Observations on the Rodentia.
Ann. Mag. Nat. Hist. (1), VIII, 81-84, pl. ii.

—— 1842 A
Observations on the Rodentia.
Ann. Mag. Nat. Hist. (1), X, 197-203, 344-347.

—— 1846 A
A natural history of the Mammalia. Vol. I: *Marsupiata,* or pouched animals. Pages 1-549, with pls. i-xxii.

Watkinson, Grace B. 1906 A
The cranial nerves of *Varanus bivittatus.*
Morphol. Jahrb., XXXV, 450-472, pls. xi-xiii.
The bibliography comprises 17 titles.

Watson, D. M. S. 1910 A
Glyptops ruetimeyeri (Lyd.), a chelonian from the Purbeck of Swanage.
Geol. Mag. (5), VII, 311-314, 2 text-figs.
Abstract in Geol. Centralbl., XV, 218.

—— 1911 A
The skull of *Diademodon,* with notes on those of some other cynodonts.
Ann. Mag. Nat. Hist. (8), VIII, 293-330, 9 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 443-444; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 92.

—— 1912 A
The larger Coal Measure Amphibia.
Mem. Manchester Soc., LVII, No. i, 1-14, 1 pl., 3 text-figs.
For a review by Broili see Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 527-530.

—— 1912 B
On some reptilian lower jaws.
Ann. Mag. Nat. Hist. (8), X, 573-587, 6 figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 524.
There is a bibliography of 20 titles.

—— 1913 A
On some features of the structure of the therocephalian skull.
Ann. Mag. Nat. Hist. (8), XI, 65-79, 7 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 523-524; Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 101.

Watson, D. M. S.—Continued 1913 B
The limbs of *Lystrosaurus.*
Geol. Mag. (5), X, 256-258, 3 text-figs.
Brief abstract in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 338.

—— 1913 C
Micropholis stowi Huxley, a temnospondylous amphibian from South Africa.
Geol. Mag. (5), X, 340-346, 5 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 167.

—— 1913 D
On the primitive tetrapod limb.
Anat. Anz., XLIV, 24-27, 2 text-figs.
Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 339; Sci. Progress, VIII, 652; Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 178.

—— 1913 E
Some notes on the anomodont brain case.
Anat. Anz., XLIV, 210-214, 3 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 102.

—— 1913 F
Brachyderpeton lineatum, a Coal measure stegocephalian.
Proc. Zool. Soc. Lond., 1913, 949-962, pls. xcvi, xcvii, text-figs. 162-167.
Abstract in Sci. Progress, VIII, 651.

—— 1913 G
Further notes on the skull, brain, and organs of special sense of *Diademodon.*
Ann. Mag. Nat. Hist. (8), XII, 217-228, 5 figs.

—— 1914 A
Notes on *Varanosaurus acutirostris* Broili.
Ann. Mag. Nat. Hist. (8), XIII, 297-310, 5 text-figs.
Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 469-470.

—— 1914 B
Pleurosaurus and the homologies of the bones of the temporal region of the lizard's skull.
Ann. Mag. Nat. Hist. (8), XIV, 84-95, pl. vi, 4 text-figs.

—— 1914 C
The Cheirotherium.
Geol. Mag. (6), I, 395-398, 2 text-figs.
Abstract in Geol. Zentralbl., XXVI, 315.

Watson, D. M. S.—Continued 1914 D

On the skull of a pariasaurian reptile, and on the relationships of that type.

Proc. Zool. Soc. Lond., 1914, 155-180, 7 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 470-472.

—— 1914 E

Procolophon trigoniceps, a cotylosaurian reptile from South Africa.

Proc. Zool. Soc. Lond., 1914, 735-747, pls. i-iii, 5 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, II, 122-124.

—— 1914 F

The Deinocephalia, an order of mammal-like reptiles.

Proc. Zool. Soc. Lond., 1914, pt. 3, 749-786, pls. iv, v, 18 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, II, 118-122.

—— 1914 G

Broomia perplexa gen. et. sp. n., a fossil reptile from South Africa.

Proc. Zool. Soc. Lond., 1914, 995-1010, pl. vi, 5 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, II, 125-126.

—— 1914 H

Eunotosaurus africanus Seeley, and the ancestry of the Chelonia.

Proc. Zool. Soc. Lond., 1914, pt. 4, 1011-1020, pl. vii, 1 text-fig.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, II, 129-130.

—— 1914 I

The early evolution of the Amphibia.

Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 532.

—— 1914 J

Notes on some carnivorous therapsids.

Proc. Zool. Soc. Lond., 1914; pt. 4, 1021-1038, 7 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, II, 126-129.

—— 1914 K

Dicynodon halli sp. n., an anomodont reptile from South Africa.

Ann. Mag. Nat. Hist. (8), XIV, 95-98, 1 fig.

—— 1914 L

On the nomenclature of the South African pariasaurians.

Ann. Mag. Nat. Hist. (8), XIV, 98-102.

Watson, D. M. S.—Continued 1914 M

On a femur of reptilian type from the Lower Carboniferous of Scotland.

Geol. Mag. (6), I, 347-348, pls. xxvii.

—— 1916 A

The monotreme skull: A contribution to mammalian morphogenesis.

Phil. Trans. Roy. Soc. Lond., CCVII, B, 311-374, pls. xxiii-xxv, 19 text-figs.

Descriptions of the skulls of *Ornithorhynchus* and *Echidna* (*Tachyglossus*).

—— 1916 B

Notes on some Palæozoic fishes.

Mem. Manchester Soc., LX, art. 2, 1-52, pls. i-iii, 9 text-figs.

This is a joint paper by D. M. S. Watson and Henry Day.

There is a bibliography of 21 titles.

—— 1916 C

On the structure of the brain-case in certain lower Permian tetrapods.

Bull. Amer. Mus. Nat. Hist., XXXV, 611-636, with 11 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 359-360; Geol. Zentralbl., XXIX, 189.

—— 1916 D

Reconstruction of the skulls of three pelycosaurs in the American Museum of Natural History.

Bull. Amer. Mus. Nat. Hist., XXXV, 637-648, 7 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 360; Geol. Zentralbl., XXIX, 188.

—— 1916 E

A review of van Hoepen's "*Stegocephalia of Senekal*" (Hoepen, E. C. N., 1916 A).

Geol. Mag. (6), III, 83-87.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 230.

—— 1917 A

Nomenclature of skull elements of Permian tetrapods.

Bull. Geol. Soc. Amer., XXVIII, 979-985.

—— 1917 B

The evolution of the tetrapod shoulder girdle and fore-limb.

Jour. Anat. Physiol. London, LII, 1-63, 27 figs.

—— 1917 C

A sketch classification of the pre-Jurassic tetrapod vertebrates.

Proc. Zool. Soc. Lond., 1917, 167-186.

Abstract in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 355-356.

Watson, D. M. S.—Continued 1919 A

On *Seymouria*, the most primitive known reptile.

Proc. Zool. Soc. Lond., 1918 (1919), 267-301, figs. 1-15.

The bibliography presents 22 titles.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 357-359.

—— 1919 B

The structure, evolution, and origin of the Amphibia.

The "orders" Rhachitomi and Stereospondyli.

Phil. Trans. Roy. Soc. Lond. (B), CCIX, 1-72, pls. i-ii, 31 text-figs.

The bibliography comprises 72 titles. Abstract in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 231-236.

This paper was issued as B 360 in 1919.

—— 1919 C

Note on Mr. Kesteven's paper on the pterygoids in Amphibia and reptiles and the parasphenoid.

Jour. Anat. Lond., LIII, 239-240.

—— 1921 A

On the cœlacanth fish.

Ann. Mag. Nat. Hist. (9), VIII, 320-337, figs. 1-5.

—— 1921 B

The basis of classification of the Therodontia.

Proc. Zool. Soc. Lond., 1921, pt. 1, 35-98, figs. 1-29.

Abstract in Neues Jahrb. Min. Geol. Pal., 1922, I, Ref., 133.

—— 1921 C

On *Eugyrinus wildi* (A. S. W.), a branchiosaur from Lancashire coal-measures.

Geol. Mag., LVIII, 70-74, 4 figs.

Abstract in Geol. Zentralbl., XXVI, 349.

—— 1923 A

Note on *Phanerorhynchus armatus.*

Ann. Mag. Nat. Hist. (9), XI, 471-472.

—— 1924 A

The elasmosaurid shoulder-girdle and fore-limb.

Proc. Zool. Soc. Lond., 1924, 885-917, 12 figs.

—— 1925 A

The structure of certain palæoniscids and the relationships of that group with other bony fishes.

Proc. Zool. Soc. Lond., 1925, 815-870, pls. i, ii, 30 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1926, I, 79.

Watson, D. M. S.—Continued 1925 B

The internal ear of *Osteolepis.*

Jour. Anat. Lond., LIX, 385-386, 1 fig.

—— 1926 A

The evolution and origin of the Amphibia.

Phil. Trans. Roy. Soc. Lond., CCXIV, 189-257, 39 figs.

The bibliography presents 58 titles.

Note on in Jour. Geol., XXXIV, 671.

—— 1927 A

The reproduction of the cœlacanth fish *Undina.*

Proc. Zool. Soc. Lond., 1927, 453-457, 2 pls.

——, and Henry **Day** 1916 A

Notes on some Palaeozoic fishes.

Mem. Manchester Soc., LX, No. 2, 1-48, pls. i-iii, 9 text-figs.

The bibliography presents 21 titles. Abstract in Nature, XCVI, 332.

——, and E. L. **Gill** 1923 A

The structure of certain Palæozoic Dipnoi.

Jour. Linn. Soc. Lond. Zool., XXXV, 163-216, 34 figs.

There is a bibliography of 27 papers.

Abstract in Neues Jahrb. Min. Geol. Pal., 1925, II, 87.

Watson, Lawrence W. 1912 A

The geological age of Prince Edward Island.

Proc. Nova Scot. Inst., XIII, 145-149.

Watson, Morrison, and Alfred H. **Young** 1879 A

The anatomy of the northern *Beluga* (*Beluga catodon* Gray; *Delphinapterus leucas* Pallas) compared with that of other whales.

Trans. Roy. Soc. Edinb., XXIX, 393-435, pls. vii, viii, 1 text-fig.

This paper deals almost wholly with the soft anatomy.

Webb, Wilfred Mark 1905 A

The ears of fishes.

Knowl. Scient. News (u.s.), II, 59-60, 8 figs.

Weber, E. H. 1821 A

De aure piscium.

Isis von Oken, 1821, 1059-1083. Extracted from *De aure et auditu hominis et animalium.* Leipsic, 1820.

See also Bull. Soc. Philom. Paris, 1821, 118-122; Thompson's Ann. Philos., III, 321-325.

Weber, Max 1886 A

Studien über Säugetiere. Ein Beitrag zur Frage nach dem Ursprung der Cetaceen.

Jena, 1886. 8vo., i-vi+1-252 pages, pls. 1-iv.

—— 1904 A

Die Säugetiere. Einführing in die Anatomie und Systematik der recenten und fossilen Mammalia.

Jena, 1904. 8vo., i-xii+1-866 pages, 567 engravings.

Pages 821-850 are occupied by a classified list of papers and books bearing on the subject.

——, and O. **Abel** 1928 A

Die Säugetiere. Einführung in die Anatomie und Systematik der recenten und fossilen Mammalia.

Zweite Auflage. Bd. II: Systematischer Teil, mit 573 Abbildungen im Text. i-xxiv, 1-898 pages.

——, and H. M. de **Burlet** 1927 A

Die Säugetiere. Einführung in die Anatomie und Systematik der recenten und fossilen Mammalia.

Zweite Auflage. Bd. I: Anatomischer Teil. Jena, i-ix+1.444 pages, 316 text-figs.

Pages 411-430 are occupied by titles of the literature of the subject.

Webster, Frederic S. 1893 A

An arctic rover.

Forest and Stream, XL, 68-69, with one figure.

Deals with distribution and habits of musk-ox (*Ovibos moschatus*).

See also pages 93, 157, 228, 403, of the same volume of Forest and Stream.

Wageman, Carroll H. 1915 A

Anticlinal structure in parts of Cotton and Jefferson Counties, Oklahoma.

Bull. U. S. Geol. Surv., DCII, 1-108, maps and illustration.

On pages 25-27 are identifications of vertebrates, made by C. W. Gilmore and E. C. Case.

—— 1918 A

Wasatch fossils in so-called Fort Union beds of the Powder River basin, Wyoming.

U. S. Geol. Surv. Profess. Pap., CVIII, 55-60, pls. xxii, xxiii, 1 text-fig.

Abstract in Jour. Wash. Acad. Sci., VI, 254-255.

Wegner, Richard N. 1922 A

Der Stützknochen, Os nariale, in der Nasenhöhle bei den Gürteltieren, Dasypodidæ, und seine homologen Gebilde bei Amphibien, Reptilien und Monotremen.

Morphol. Jahrb., LI, 413-489, pls. x-xv, 43 text-figs.

The bibliography contains 64 titles.

Wegner, Th. 1911 A

Desmemys bertelsmanni n. g. n. sp. Ein Beitrag zur Kenntnis der Thalassemydidæ Rütimeyer.

Palaeontogr., LVIII, 105-132, pls. viii, ix, 2 text-figs.

Abstracts in Geol. Centralbl., XVII, 431; Sci. Progress, VI, 576.

—— 1917 A

Chelonia gwinneri Wegner aus dem Rupelton von Flörsheim a. M.

Abh. Senckenb. naturf. Ges., XXXVI, 361-372, pls. xxviii-xxx.

Weidenreich, Franz 1913 A

Über das Hüftbein und das Becken der Primaten und ihre Umformung durch den aufrechten Gang.

Anat. Anz., XLIV, 497-513, 3 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 178-180.

—— 1922 A

Über die Beziehungen zwischen Muskelapparat und Knochen und den Charakter des Knochengewebes.

Anat. Anz., Ergänzungsh., LV, 28-53.

The bibliography contains 33 titles.

—— 1922 B

Der Menschenfuss.

Zeitschr. Morphol. Anthrop., XXVI, 51-282, 65 figs.

The bibliography occupies pages 278-282.

—— 1925 A

Wie kommen functionelle Anpassungen der Aussenformen des Knochenskeletts zustande?

Palaeont. Zeitschr., VII, 34-44.

A bibliography of 14 titles is presented.

—— 1926 A

Über Knochen, Zahnbein und Schmelz.

Palaeont. Zeitschr., VIII, 44-54.

Weidman, Samuel 1907 A

Pleistocene or Glacial Geology.

Wis. Geol. Nat. Hist. Surv., Bull. XVI, 409-569.

Weil, R. 1900 A
Development of the ossicula auditûs in the opossum.
Ann. N. Y. Acad. Sci., XII, 103-107, pls. i, ii.

Weiler, Wilhelm 1922 A
Beiträge zur Kenntniss der Tertiären Fische des Mainzer Beekens.
Abh. hess. geol. Landesanst., VI, 69-155, pls. i-iii.

Weinberg, Richard 1903 A
Fossile Hirnformen. I: *Anchilophus desmaresti.*
Zeitschr. wiss. Zool., LXXIV, 490-500, pl. XXV.

—— 1926 A
Befund bei Hyperdactylie.
Morphol. Jahrb., LVI, 137-188, pls. vi, vii, 4 text-figs.

Weiss, Armin 1901 A
Die Entwicklung der Wirbelsäule der weissen Ratte, besonders der vordersten Halswirbel.
Zeitschr. wiss. Zool., LXIX, 492-532.
There is a bibliography of 41 titles.

Weitzel, A. 1865 A
Die Furcula. Ein Beitrag zur Osteologie der Vögel.
Zeitschr. gesammt. Naturw., XXV, 317-319.

Weld, Mason C. 1869 A
On the remains of beaver in New Jersey.
Amer. Jour. Sci. (2), XLVIII, 433-434.
Reprinted in Ann. Mag. Nat. Hist. (4), v, 70-71.

Wellburn, Edgar D. 1900 C
On the occurrence of *Strepsodus sulcidens* Handcock and Atthey, in the Yorkshire Coal Measures.
Proc. Yorksh. Geol. Polyt. Soc. (n.s.), XIV, 86-87, pl. xviii.
Abstracts in Geol. Centralbl., I, 509; Rev. crit. Paléozool., v, 68.

—— 1901 A
On the pectoral fin of *Cœlacanthus.*
Geol. Mag. (4), VIII, 71-72.
See note by A. Andreæ in Neues Jahrb. Min. Geol. Pal., 1902, I, 309; also abstracts in Geol. Centralbl., I, 543; Rev. crit. Paléozool., v, 125.

—— 1901 B
On the fish fauna of the Yorkshire Coal Measures.
Proc. Yorksh. Geol. Polyt. Soc. (n.s.), XIV, 159-174.

Wellburn, Edgar D.—Continued 1902 A
On the genus *Cœlacanthus* as found in the Yorkshire Coal Measures, with a restoration of the fish.
Proc. Yorksh. Geol. Polyt. Soc., XIV, 474-483, 1 text-fig.

Weller, S. 1902 A
The composition, origin, and relationships of the Corniferous fauna in the Appalachian province of North America.
Jour. Geol., X, 423-432.
The list of genera of fishes furnished by C. R. Eastman.

—— 1906 A
Kinderhook faunal studies. IV: The fauna of the Glen Park limestone.
Trans. Acad. Sci. St. Louis, XVI, 435-471, pls. i, ii.

—— 1926 A
Fossil collecting in the Mississippi formations of the Mississippi Valley.
Nat. Hist., XXVI, 487-

Wells, F. R. 1922 A
On the morphology of the chondrocranium of the larval herring (*Clupea harengus*).
Proc. Zool. Soc. Lond., 1922, 1213-1229, 11 figs.
There is a bibliography of 19 titles.

Wells, Grace A. 1917 A
The skull of *Acanthias vulgaris.*
Jour. Morphol., XXVIII, 417-436, pls. i-iii.
The bibliography presents 20 titles.

Wemple, Edna M. 1906 A
New cestraciont teeth from the west-American Triassic.
Bull. Dept. Geol. Univ. Calif., v, 71-73, pl. vii.
Abstracts in Geol. Centralbl., XII, 388; Neues Jahrb. Min. Geol. Pal., 1908, II, Ref., 446; Rev. crit. Paléozool., XI, 90 (as Edne M. Temple).

Werner, F. 1898 A
Review of Case: On the osteology and relationships of *Protostega* (Case, E. C., 1897 B.).
Verh. Zool.-bot. Ges. Wien, XLVIII, 280-281.

—— 1902 A
Prodromus einer Monographie der Chamaleonten.
Zool. Jahrb., Syst., XV, 295-460, pls. xv-xxvii, 5 text-figs.

—— 1904 A
Beiträge zur Biologie der Reptilien und Batrachier.
Biol. Centralbl., XXIV, 332-348, 9 figs.

Werth, E. 1917 A

Über die Beziehungen des jungdiluvialen *Bison priscus* zu den lebenden Bison-Arten.

Sitz.-Ber. Ges. naturf. Freunde Berlin, 1917, 248-258, 4 figs.

Abstract in Geol. Zentralbl., XXIII, 350.

West, G. S. 1895 A

On the buccal glands and teeth of certain poisonous snakes.

Proc. Zool. Soc. Lond., 1895, 812-826, pls. xliv-xlvi.

——— 1898 A

On the histology of the salivary, buccal, and harderian glands of the Colubridæ, with notes on their tooth succession and the relationships of the poison duct.

Jour. Linn. Soc. Zool., XXVI, 517-526, pls. xxxiv, xxxv.

West, H. H. 1877 B

Report of discovery of mastodon tusk.

Kansas City Rev. Sci. Indust., I, 336-337.

Westrienen, Anna F. A. S. van 1906 A

Das Kniegelenk der Primaten, mit besonderer Berücksichtigung der Anthropoïden.

Petrus Camper, Bijdr. Anat., Haarlem, IV, 1-60, pl. i, 22 text-figs.

Wetmore, Alexander 1917 A

The relationships of the fossil bird *Palæochenöides mioceanus.*

Jour. Geol., XXV, 555-557, 1 text-fig. Abstract in Jour. Wash. Acad. Sci., VIII, 408.

——— 1919 A

Notes on the structure of the palate in the Icteridæ.

Auk, XXXVI, 190-197, 2 figs.

——— 1922 A

A fossil owl from the Bridger Eocene.

Proc. Acad. Nat. Sci. Phila., LXXIII, 455-458, 2 figs.

Describes *Minerva saurodosis.*

Abstract in Geol. Zentralbl., XXVIII, 507.

——— 1923 A

Avian fossils from the Miocene and Pliocene of Nebraska.

Bull. Amer. Mus. Nat. Hist., XLVIII, 483-507, 20 figs.

Abstract in Geol. Zentralbl., XXX, 254.

——— 1924 A

Fossil birds from southeastern Arizona.

Proc. U. S. Nat. Mus., LXIV, art. 5, 1-18, 9 figs.

Wetmore, Alexander—Cont'd 1925 A

The systematic position of *Palæospiza bella* Allen, with observations on other fossil birds.

Bull. Mus. Comp. Zool., LXVII, 183-193, 4 pls., 4 text-figs.

——— 1926 A

Descriptions of additional fossil birds from the Miocene of Nebraska.

Amer. Mus. Novit., CCXI, 1-5, 5 figs.

——— 1926 B

Fossil birds from the Green River deposits of eastern Utah.

Ann. Carnegie Mus., XVI, 391-403, pls. xxxvi-xxxvii.

——— 1926 C

Description of a fossil hawk from the Miocene of Nebraska.

Ann. Carnegie Mus., XVI, 403-409, pl. xxxviii.

——— 1926 D

Observations on fossil birds described from the Miocene of Maryland.

Auk, XLIII, 462-468.

Citations of literature in foot-notes.

——— 1926 E

The fossil birds of North America.

Nat. Hist., XXVI, 525-526.

——— 1926 F

An additional record for the fossil hawk *Urubitinga enecta.*

Amer. Mus. Novit., No. CCXLI, 1-3, 3 figs.

——— 1927 A

Fossil birds from the Oligocene of Colorado.

Proc. Col. Mus. Nat. Hist., VII, 3-13, 23 figs.

——— 1927 B

A record of the ruffed grouse from the Pleistocene of Maryland.

Auk, XLIV, 561.

——— 1928 A

Prehistoric ornithology in North America.

Jour. Wash. Acad. Sci., XVIII, 145-158.

——— 1928 B

Bones of birds from the Ciego Montero deposits of Cuba.

Amer. Mus. Novit., No. CCCI, 1-5, 2 figs.

——— 1928 C

Additional specimens of fossil birds from the Upper Tertiary deposits of Nebraska.

Amer. Mus. Novit., No. CCCII, 1-5, 2 figs.

Wetmore, Alexander—Cont'd 1928 D
The tibio-tarsus of the fossil hawk *Buteo typhoius.*
Condor, xxx, 149-150, figs. 58-61.

——, and W. DeW. **Miller** 1926 A
The revised classification for the fourth edition of the A. O. U. Check-list.
Auk (n.s.), xliii, 337-346.

Wherry, Edgar T. 1912 A
Age and correlation of the "New Red" or Newark group in Pennsylvania.
Proc. Acad. Nat. Sci. Phila., lxiv, 373-379.

Wherry, George 1901 A
Direction of spirals in horns.
Nature, lxiii, 252, 348.

—— 1902 A
Observations on the horns of animals.
Brit. Med. Jour., Sept. 1902, pp. 973-974.

White, Chas. A. 1885 A
Certain phases in the geological history of the North American continent, biologically considered.
Proc. Biol. Soc. Wash., ii, 14-66.

White, E. I. See **Woodward** and **White.**

White, Israel C. 1883 A
The geology of the Susquehanna River region in the six counties of Wyoming, Lackawanna, Luzerne, Columbia, Montana, and Northumberland.
Geol. Surv. Penn. 2d, G7, 1-464.

—— 1909 A
A bone of a large pareiasaurian.
Science (n.s.), xxix, 194.

—— 1911 A
Terrace near Morgantown, West Virginia.
G. F. Wright's "Ice Age in North America," 5th ed., pages 377-378.
Extract from a paper published by I. C. White about 1886.

—— 1917 A
Note on *Pareiasaurus?*
W. Virginia Geol. Surv.; Braxton and Clay counties, 822-825.
Name *Pareiasaurus? henneni* proposed.

White, J. W. 1905 A
Ueber die Entwicklung des Kopfskeletts bei Selachiern.
C. R. Congr. internat. Zool., vi, Berne, 1904, 319-322.

White, Philip J. 1895 B
A sternum in *Hexanchus griseus.*
Anat. Anz., xi, 222-224, 2 text-figs.

—— 1896 A
Note on the extra-branchial cartilages of *Scyllium canicula.*
Anat. Anz., xii, 158.

Whiteaves, Joseph F. 1877 A
Descriptions of fossils of Grand Rapid.
Can. Geol. Surv. Rep. of Progress, 1875-1876, 316-320.

—— 1889 B
Abstract of part on fishes in Geol. Mag. (3), vii, 42.

—— 1901 A
Summary of work in palæontology during 1898.
Summ. Rep. Geol. Surv. Canada, 1898 (1901), xi, A, 173-190.

—— 1901 B
Report on palæontology and zoology.
Summ. Rep. Geol. Surv. Canada for 1900, 176-188.

—— 1903 A
Crania of extinct bisons from the Klondike creek gravels.
Ottawa Naturalist, xvi, 240-241.
Abstract in Geol. Centralbl., x, 42.

—— 1903 B
On fish remains found in New Brunswick.
Rep. Geol. Surv. Canada, 1900, xiii, M, 29.

—— 1906 A
Report on palæontology and zoology.
Summ. Rep. Geol. Surv. Canada for 1906, 170-174.

—— 1907 A
Notes on the skeleton of a white whale or *Beluga,* recently discovered in Pleistocene deposits at Pakenham, Ontario.
Ottawa Naturalist, xx, 214-216.
Abstract in Geol. Centralbl., ix, 398.

—— 1907 B
Illustrations of the fossil fishes of the Devonian rocks of Canada. Part III: Supplementary notes.
Trans. Roy. Soc. Canada (3), i, Sec. 4, 245-274, pls. i-iv.
Abstract in Rev. crit. Paléozool., 13, 158.

—— 1908 A
Reports on palæontology and zoology.
Summ. Rep. Geol. Surv. Canada for 1907, 105-109.

Whitehead, R. H., and J. A. Waddell 1911 A

The early development of the mammalian sternum.

Amer. Jour. Anat., XII, 89-106, 8 figs.

Whitehouse, Richard H. 1910 A

Some remarks on the teleostean caudal fin.

Ann. Mag. Nat. Hist. (8), V, 426-428.

—— 1910 B

The caudal fin of the Teleostomi.

Proc. Zool. Soc. Lond., 1910, 590-627, pls. xlvii-l, text-fig. 57.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 109.

—— 1910 C

The caudal fin of fishes (Preliminary paper).

Proc. Roy. Soc. Lond., LXXXII, 134-143, 4 figs.

—— 1914 A

Evolution of the caudal fin of fishes.

Rep. Brit. Assoc. Adv. Sci., LXXXIII, Birmingham, 1913, 522-523.

—— 1918 A

The evolution of the caudal fins of fishes.

Rec. Indian Mus., XV, 135-142, 3 figs.

Whitnal, Harold Orville 1925 A

Dinosaurs and their world.

Pages 1-26, 5 pls. Colgate University, Hamilton, N. Y.

Whitney, J. D. 1862 A

Report of a geological survey of the Upper Mississippi Lead Region.

Geol. Surv. Wisconsin, I, i-vi+73-455, 39 text-figs.

—— 1864 A

Progress of the Geological Survey of California.

Amer. Jour. Sci. (2), XXXVIII, 256-264, 298.

—— 1865 A

Geological Survey of California.

Geology, vol. 1, Report of progress, i-xxvii +1-498 pages, pl. i, 81 text-figs.

—— 1866 A

Geology of the Lead Region of northwestern Illinois.

Geol. Surv. Ill., I, 153-207, section and map.

—— 1867 C

Exhibition of a canine tooth supposed to belong to a hyaena.

Proc. Calif. Acad. Sci., III, 356-357.

Whitney, J. D.—Continued 1879 B

Human remains and works of art in the auriferous gravel series.

Mem. Mus. Comp. Zool., VI, 258-288.

This is sec. V of chap. III of J. D. Whitney's "The Auriferous Gravels of the Sierra Nevada of California."

Whittard, W. F. 1928 A

On the structure of the palate and mandible of *Archegosaurus decheni* Goldfuss.

Ann. Mag. Nat. Hist. (10), I, 255-264, pl. xiii, 3 text-figs.

The bibliography presents 15 titles.

See **Bulman** and **Whittard.**

Whittlesey, Charles 1866 A

On the fresh-water glacial drift of the northwestern states.

Smithson. Contrib. Knowl., XV, art. III, i-v+1-32 pages, 2 pls., 11 text-figs.

Wichmann, C. E. A. 1907 A

Over fossiele Trichechiden uit Zeeland en België.

Versl. Med. Akad. Amsterdam, XV, pt. 2, 798-811, plate, 2 text-figs.

Presents (pp. 809-811) a list of works on fossil walruses.

Wiedersheim, R. 1877 B

Das Kopfskelet der Urodelen, ein Beitrag zur vergleichenden Anatomie des Wirbelthier-Schädels.

Morphol. Jahrb., III, 352-448, 459-548, 9 pls., 6 text-figs.

Citations made from a reprint i-viii+1-187 pages, pls. i-viii, 6 text-figs.

—— 1877 C

Nachträgliche Bemerkungen zu meinem Aufsatze; "Die ältesten Formen des Carpus und Tarsus der heutigen Amphibien."

Morphol. Jahrb., III, 152-154, 5 text-figs.

—— 1879 A

Zur Anatomie des *Amblystoma weismanni.*

Zeitschr. wiss. Zool., XXXII, 216-236, pls. xi, xii.

—— 1880 C

Zur Histologie der Dipnoër-Schuppen.

Arch. mikr. Anat. Bonn, XVIII, 122-129, pl. v.

—— 1880 D

Ueber die Vermehrung des os centrale in Carpus und Tarsus des Axolotls.

Morphol. Jahrb., VI. 581-582. pl. xxx.

Wiedersheim, R.—Continued 1880 E

Über Reptilien—Gebisse vom Säugethiertypus und über den Tarsus der Saurier.

Zool. Anz., III, 493-496, 2 figs.

—— 1881 B

Über das Becken der Fische.

Morphol. Jahrb., VII, 326-327, 2 figs.

—— 1886 A

Zur Urgeschichte der Gliedmassen der Wirbelthiere.

Humboldt, V, 361-370 (Not seen).

—— 1892 A

Die Phylogenie der Beutelknochen.

Zeitschr. wiss. Zool., Suppl., 43-66.

Wiegmann, F. A. 1829 A

Description of *Trachyderma horridum.*

Isis, XXII, cols. 421-422.

For *Trachyderma,* preoccupied, the name *Heloderma* was later proposed.

—— 1829 B

Ueber das Acaltetepon oder Temacuilcahuya, eine neue Gattung der Saurier, *Heloderma.*

Isis von Oken, XXII, cols. 624-629.

—— 1834 A

Herpetologia Mexicana, etc.

Folio. Berlin, 1834, i-vi+1-54, pls. i-ix.

—— 1838 B

Betrachtungen über das Gebiss der Raubthiere (*Ferœ*).

Arch. Naturges., IV, i, 257-298.

Wieland, G. R. 1897 A

Variability of external sutures in the skull of *Chelone mydas* L.

Amer. Naturalist, XXXI, 446.

—— 1900 A

Abstract in Geol. Centralbl., I, 667.

—— 1900 B

Abstract in Geol. Centralbl., II, 120.

—— 1902 A

Notes on the Cretaceous turtles, *Toxochelys* and *Archelon,* with a classification of the marine Testudinata.

Amer. Jour. Sci. (4), XIV, 95-108, 2 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 171-172.

—— 1903 A

Notes on the Cretaceous turtle *Archelon.* I: On the structure of the carapace. II: Associated fossils.

Amer. Jour. Sci. (4), XV, 211-216, 1 text-fig.

Abstract in Geol. Centralbl., V, 39.

Wieland, G. R.—Continued 1903 B

Polar climate in time the major factor in the evolution of plants and animals.

Amer. Jour. Sci. (4), XVI, 401-430.

—— 1904 A

Structure of the Upper Cretaceous turtles of New Jersey; *Adocus, Osteopygis,* and *Propleura.*

Amer. Jour. Sci. (4), XVII, 112-132, pls. i-ix, 7 text-figs.

Abstracts in Geol. Centralbl., VI, 715; Rev. crit. Paléozool., X, 145.

—— 1904 B

Structure of the Upper Cretaceous turtles of New Jersey, *Lytoloma.*

Amer. Jour. Sci. (4), XVIII, 183-196, pls. v-viii, 6 text-figs.

Abstracts in Geol. Centralbl., VI, 715; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 167; Rev. crit. Paléozool., X, 144.

—— 1905 A

A new Niobrara *Toxochelys.*

Amer. Jour. Sci. (4), XX, 325-343, pl. X, 8 text-figs.

Abstracts in Geol. Centralbl., VIII, 376; Nature, LXXIII, 134; Rev. crit. Paléozool., X, 146; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 162.

—— 1905 B

Structure of the Upper Cretaceous turtles of New Jersey: *Agomphus.*

Amer. Jour. Sci. (4), XX, 430-447, 9 text-figs.

Abstracts in Geol. Centralbl., VIII, 376; Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 465; Rev. crit. Paléozool., X, 147; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 163.

—— 1906 A

The osteology of *Protostega.*

Mem. Carnegie Mus., II, 279-298, pls. xxxi-xxxiii, 8 text-figs.

Abstracts in Geol. Centralbl., XI, 331-332; Rev. crit. Paléozool., X, 147, 148; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 162; Sci. Progress, I, 460.

—— 1906 B

Plastron of the Protosteginæ.

Ann. Carnegie Mus., IV, 8-14, pls. i, ii, 5 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 464; Rev. crit. Paléozool., XI, 225.

—— 1906 C

Dinosaurian gastroliths.

Science (n.s.), XXIII, 819-821.

Abstracts in Rev. crit. Paléozool., XI, 13; Jahresber. Anat. Entwickl. (N.F.), XI, pt. 3, 160; Nature, LXXVII, 117.

Wieland, G. R.—Continued 1907 A

Gastroliths.

Science (n.s.), XXV, 66-67.

Abstract in Rev. crit. Paléozool., XI, 221.

—— 1909 A

Revision of the Protostegidæ.

Amer. Jour. Sci. (4), XXVII, 101-130, pls. ii-iv, 12 text-figs.

Abstracts in Geol. Centralbl., XIV, 340-341;. Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 293; Rev. crit. Paléozool., XIII, 153; Nature, LXXIX, 496; LXXXIII, 532; Sci. Progress, IV, 670.

—— 1910 A

Plesiosaurus (*Polyptychodon*) *mexicanus* Wieland.

Parergon Inst. geol. Mexico, III, 359-365, pl. 1.

Abstract in Rev. crit. Paléozool., XVI, 7.

—— 1909 B

A new armored saurian from the Niobrara.

Amer. Jour. Sci. (4), XXVII, 250-252, 7 text-figs.

Abstracts in Geol. Centralbl., XIV, 340; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 301; Rev. crit. Paléozool., XIV, 179; Naturw. Rundschau, XXVII, 250-252.

—— 1911 A

Notes on the armored Dinosauria.

Amer. Jour. Sci. (4), XXXI, 112-124, 7 text-figs.

Abstracts in Geol. Centralbl., XVII, 41; Sci. Progress, VI, 570.

Reviews in Rev. crit. Paléozool., XV, 154; XVI, 5.

—— 1912 A

Note on the dinosaur-turtle analogy.

Science (n.s.), XXXVI, 287-288.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 267; Sci. Progress, VIII, 15; Rev. crit. Paléozool., XVII, 75; XX, 50; Geol. Zentralbl., XXI, 40.

—— 1912 B

On the dinosaur-turtle analogy.

Mem. Accad. Sci. Bologna (6), IX, 297-300.

—— 1918 A

The Vero man and the sabre tooth.

Science (n.s.), XLVIII, 93-94.

—— 1920 A

The longneck sauropod *Barosaurus*.

Science (n.s.), LI, 528-530.

—— 1923 A

A new Paraná pleurodiran.

Amer. Jour. Sci. (5),, V, 1-14, pl. i, 3 text-figs.

The bibliography comprises 16 titles. Abstract in Rev. Géol. Sci. conn., V, 129.

Wieland, G. R.—Continued 1925 A

Dinosaur feed.

Science (n.s.), LXI, 601-603.

—— 1925 B

Dinosaur extinction.

Amer. Naturalist, LIX, 557-565.

Wijhe, J. W. van. See **Van Wijhe, J. W.**

Wilber, C. D. 1861 A

Mastodon giganteus.

Trans. Ill. Nat. Hist. Soc., I, ser. I, 59-64, 3 text-figs.

Wilbrand, Johann B. 1823 A

Ueber die Beweglichkeit des Oberkiefers der Vögel und insbesondere über die physiologische Bedeutung dieser Beweglichkeit.

Isis von Oken, 1823, 509-513.

—— 1824 A

Ueber den Thorax der Fische, und insbesondere über die wahren und unächten Rippen und über das Brustbein derselben.

Isis von Oken, 1824, 982-986.

Wilckens, Otto 1911 A

Über das Aussterben grosser Tiergruppen im Laufe der Erdgeschichte.

Naturw. Wochenschr., XXVI (N.F., X), 705-712.

Abstract in Geol. Centralbl., XVII, 186-187.

Wilder, Burt G. 1865 A

On morphology and teleology, especially in the limbs of Mammalia.

Mem. Bost. Soc. Nat. Hist. (n.s.), I, 46-80.

—— 1867 A

On the morphological value and relations of the human hand.

Amer. Jour. Sci. (2), XLIII, 44-48, 3 figs.

—— 1868 A

The hand as an unruly member.

Amer. Naturalist, I, 414-422, 482-491, 631-638, pls. xi, xii.

—— 1872 A

Intermembral homologies.

Proc. Bost. Soc. Nat. Hist., XIV, 154-188, 309-339, 399-420, with 5 figs.

The bibliography presents 340 titles.

—— 1874 A

On the composition of the carpus in dogs.

Proc. Amer. Assoc. Adv. Sci., Portland, 1873, XXII, B, 301-302, 1 fig.

—— 1875 A

On a fœtal manatee and cetacean, with remarks on the affinities and ancestry of the Sirenia.

Amer. Jour. Sci. (3), X, 105-114, pl. viii.

Wilder, Burt G.—Continued 1876 A

Notes on North American ganoids, *Amia, Lepidosteus, Acipenser*, and *Polyodon.*

Proc. Amer. Assoc. Adv. Sci., Salem, XXIV, 151-196, pls. i-viii.

—— 1897 A

Amphibia or Batrachia.

Science (n.s.), VI, 295-296.

Wilder, Frank A. 1900 A

Geology of Lyon and Sioux Counties [Iowa].

Iowa Geol. Surv., X, 86-155, 2 maps.

Wilder, Harris H. 1891 A

A contribution to the anatomy of *Siren lacertina.*

Zool. Jahrb. Anat., IV, 653-696, pls. xxxi-xl, 7 text-figs.

There is a bibliography of 18 titles.

Wilder, Inez W. 1920 A

The urodele vomer.

Anat. Record, XVII, 349.

Wilhelm, Jakob 1924 A

Zur Entwicklungsgeschichte der Hinterhauptsschuppe des Rindes.

Anat. Anz., LIX, 1-11, 7 figs.

The bibliography presents 13 titles.

Wilkie, H. C. 1926 A

The ossicula auditûs of the common badger, *Meles taxus.*

Proc. Zool. Soc. Lond., 1926, 815-823, 5 figs.

Willcox, M. A. 1899 A

Notes on the occipital region of the trout, *Trutta fario.*

Zool. Bull., II, 151-154, 1 fig.

Willett, Edgar W. 1881 A

Note on a mammalian jaw from the Purbeck beds at Swanage, Dorset.

Quart. Jour. Geol. Soc., XXXVII, 376-380, 1 fig.

Willey, Arthur 1920 A

An apodous *Amia calva.*

Proc. Zool. Soc. Lond., 1920, 89-90.

Williams, George H. 1894 A

[Account of the finding of a tooth of a mastodon near Clear Spring, Washington County, Maryland.]

Johns Hopkins Univ. Circ., XIII, No. 109, 26-27.

Williams, Henry Smith 1897 A

Paleontological progress of the century.

Harper's New Month. Mag., XCIV, 674-689; 12 figs.

Williams, Henry Smith, and C. L. **Breger** 1916 A

The fauna of the Chapman sandstone of Maine, including descriptions of some related species from the Moose River sandstone.

U. S. Geol. Surv. Profess. Pap. LXXXIX, 7-347, 27 pls.

Williams, Stephen R. 1902 A

Changes accompanying the migration of the eye and observations on the tractus opticus and tectum opticum in *Pseudopleuronectes americanus.*

Bull. Mus. Comp. Zool., XL, 1-57, pls. i-v, 6 text-figs.

The bibliography comprises 54 titles.

Williamson, Charles 1894 A

On the anatomy of the pectoral arch of the gray gurnard (*Trigla gurnardius*), with special reference to its innervation.

Rep. Fish. Board Scotland, XII, 322-332, p's. xiii-xv.

Williamson, C. W. 1905 A

History of Western Ohio and Auglaize County, with illustrations and biographical sketches of pioneers and prominent public men.

8vo. Columbus, Ohio, i-vi+1-860, numerous illustrations.

There is given on pages 334-339 accounts of the discoveries of several mastodons in the county and of the skull and house of *Castoroides ohioensis.*

Most of this is quoted in Bull. No. 16, 4th ser., Geol. Surv. Ohio, 1912, 38, 39.

Williamson, W. C. 1851 A

Investigations into the structure and development of the scales and bones of fishes.

Phil. Trans. Roy. Soc. Lond., 1851, 643-702, pls. xxviii-xxxi.

Williston, S. W. 1879 A

Are birds derived from dinosaurs?

Kansas City Rev. Sci. Indust., III, 457-460.

—— 1885 A

Ueber *Ornithocheirus hilsensis* Koken.

Zool. Anz., VIII, 628-629.

—— 1886 A

Über *Ornithocheirus hilsensis* Koken.

Zool. Anz., IX, 282-283.

—— 1893 D

The Niobrara Cretaceous of western Kansas.

Trans. Kansas Acad. Sci., XIII, 107-111, 2 plates.

Williston, S. W.—Continued 1897 K

Vertebrates from the Kansas Permian.

Science (n.s.), v, 395.

—— 1898 E

See Hay, O. P., 1902 A, 241.

Review in Jour. Geol., vii, 100.

—— 1898 L

The Upper Cretaceous of Kansas.

Univ. Kansas Geol. Surv., iv, 28-32.

Addenda to paper by George I. Adams. Contains letter from E. D. Cope (Cope, E. D., 1898 A). Historical in purpose.

—— 1900 A

Abstract in Geol. Centralbl., ii, 121.

—— 1901 A

The dinosaurian genus *Creosaurus*, Marsh.

Amer. Jour. Sci. (4), xi, 111-112.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, i, Ref., 344; Geol. Centralbl., ii, 665; Nature, lxiii, 481.

—— 1901 B

A new turtle from the Kansas Cretaceous.

Trans. Kansas Acad. Sci., xvii, 195-199, pls. xviii-xxii.

Describes *Porthochelys laticeps* Willist.

Abstract in Geol. Centralbl., ii, 764

—— 1902 A

On the hind limb of *Protostega*.

Amer. Jour. Sci. (4), xiii, 276-278, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1903, i, Ref., 158; Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 96.

—— 1902 B

On the skeleton of *Nyctodactylus*, with restoration.

Amer. Jour. Anat., i, 297-305, plate.

For note on this paper see Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 518.

Abstract in Jahresber. Anat. Entwickl. (N.F.), viii, pt. 3, 106-107.

—— 1902 C

On the skull of *Nyctodactylus*, an Upper Cretaceous pterodactyl.

Jour. Geol., x, 520-531, 2 plates.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 518; Geol. Centralbl., iv, p. 722; ix, 727.

—— 1902 D

Restoration of *Dolichorhynchops osborni*, a new Cretaceous Plesiosaur.

Kansas Univ. Sci. Bull., i, 241-244, pl. xi.

Williston, S. W.—Continued 1902 E

Notes on some new or little known extinct reptiles.

Kansas Univ. Sci. Bull., i, 247-254, pls. xii, xiii.

Abstract in Rev. crit. Paléozool., viii, 15-16.

—— 1902 F

On certain homoplastic characters in aquatic air-breathing vertebrates.

Kansas Univ. Sci. Bu'l., i, 259-266.

—— 1902 G

Winged reptiles.

Pop. Sci. Month., lx, 314-322, 2 figs.

—— 1902 H

Dragons of the air.

Science (n.s.), xv, 67-68.

Review of Seeley's "Dragons of the air, an account of extinct flying reptiles."

—— 1902 I

Animals of the past.

Science (n.s.), xv, 586-587.

A review of Lucas' work with the same title.

—— 1902 J

A fossil man from Kansas.

Science (n.s.), xvi, 195-196.

—— 1902 K

The Laramie Cretaceous of Wyoming.

Science (n.s.), xvi, 952-953.

Abstract in Geol. Centralbl., ix, 717.

—— 1902 L

Bibliography and catalogue of the fossil Vertebrata of North America. By Oliver Perry Hay.

Jour. Geol., x, 918-919.

A review of Hay, O. P., 1902 A.

—— 1902 M

An arrow-head found with bones of *Bison occidentalis* Lucas, in western Kansas.

Amer. Geologist, xxx, 313-315, 1 text-fig.

Abstracts in Geol. Centralbl., ix, 725; Neues Jahrb. Min. Geol. Pal., 1904, ii, Ref., 299-300.

—— 1902 N

[Preliminary list of amphibians and reptiles found in the Permian near Orlando, Oklahoma.]

Rep. Geol. Nat. Hist. Okla., 60.

Williston, S. W.—Continued 1903 A

North American plesiosaurs. Part I.

Field Columb. Mus. Geol., II, 1-77, pls. i-xxix; text-figs. 1-13.

On pages 7-12 is presented "A Catalogue and Bibliography of the North American Plesiosauria."

Abstracts in Amer. Jour. Sci. (4), XVI, 473-474; Geol. Centralbl., IV, 57; Rev. crit. Paléozool., VIII, 16-17; Jahresber. Anat. Entwickl. (N.F.), IX, pt. 3, 162-164.

—— 1903 B

On the osteology of *Nyctosaurus* (*Nyctodactylus*), with notes on American pterosaurs.

Field Columb. Mus. Geol., II, 125-163, pls. xl-xliv, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 518; Geol. Centralbl., IV, 722; Rev. crit. Paléozool., VIII, 13-14.

—— 1903 C

On the structure of the plesiosaurian skull.

Science (n.s.), XVII, 980.

—— 1903 D

Review of J. C. Merriam's "New Ichthyosauria from the Upper Triassic of California."

Jour. Geol., XI, 515-516.

—— 1904 A

The relationships and habits of the mosasaurs.

Jour. Geol., XII, 43-51.

Abstracts in Geol. Centralbl., IX, 727; Rev. crit. Paléozool., VIII, 211-212.

—— 1904 B

The temporal arches of the Reptilia.

Biol. Bull., VII, 175-192, text-figs. 1-17.

—— 1904 C

The fingers of pterodactyls.

Geol. Mag. (5), I, 59-60.

Abstracts in Geol. Centralbl., V, 328; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 168; Neues Jahrb. Min. Geol. Pal., 1905, I, Ref., 520.

—— 1904 D

Notice of some new reptiles from the Upper Trias of Wyoming.

Jour. Geol., XII, 688-697, text-figs. 1-6.

—— 1904 E

The stomach stones of the plesiosaurs.

Science (n.s.), XX, 565.

—— 1904 F

Some osteological terms.

Science (n.s.), XVIII, 829-830.

Williston, S. W.—Continued 1905 A

On the occurrence of an arrow-head with bones of an extinct bison.

Internat. Congr. Americanists, XIII, New York, 1902, 335-337, 1 text-fig.

—— 1905 B

The Hallopus, Baptanodon, and Atlantosaurus beds of Marsh.

Jour. Geol., XIII, 338-350.

Abstracts in Geol. Centralbl., X, 513; Rev. crit. Paléozool., XII, 80-82.

—— 1905 C

A new armored dinosaur from the Upper Cretaceous of Wyoming.

Science (n.s.), XXII, 503-504.

Abstracts in Neues Jahrb. Min. Geol. Pal., Ref., 144; Rev. crit. Paléozool., XII, 79.

—— 1905 D

An important new locality for Triassic vertebrates.

Science (n.s.), XXI, 297-298.

—— 1905 E

The phylogeny and classification of the Reptilia.

Science (n.s.), XXI, 294-295.

—— 1905 F

On the Lansing man.

Amer. Geologist, XXXV, 342-346.

—— 1905 G

[Reviews of papers by Osborn, Merriam, and Fraas.]

Jour. Geol., XIII, 183-184.

—— 1906 A

American amphicœlian crocodiles.

Jour. Geol., XIV, 1-18, 12 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 466; Rev. crit. Paléozool., XII, 82; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 163; Sci. Progress, I, 458.

—— 1906 B

North American plesiosaurs; *Elasmosaurus*, *Cimoliasaurus*, and *Polycotylus*.

Amer. Jour. Sci. (4), XXI, 221-236, pls. i-vi, text-figs. 1-5.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 464; Rev. crit. Paléozool., XVII, 77; XII, 83; Jahresber. Anat. Entwickl. (N.F.), XII, pt. 3, 161.

—— 1907 A

The skull of *Brachauchenius*, with observations on the relationships of the plesiosaurs.

Proc. U. S. Nat. Mus., XXXII, 477-489, pls. xxxiv-xxxvii.

Abstracts in Geol. Centralbl., XI, 332; Sci. Progress, II, 517; Rev. crit. Paléozool., XII, 8; Amer. Jour. Sci. (4), XXV, 85; Jahresber. Anat. Entwickl. (N.F.), XIII, pt. 3, 93.

Williston, S. W.—Continued 1907 B

Determination of vertebrates from the Rattlesnake beds of Texas.

Bull. Univ. Texas, No. 93 (Sci. series No. 11), 53-54.

—— 1908 A

The Cotylosauria.

Jour. Geol., XVI, 139-148, 6 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 122-123; Geol. Centralbl., XII, 222; Sci. Progress, III, 469.

—— 1908 B

The oldest known reptile, *Isodectes punctulatus* Cope.

Jour. Geol., XVI, 395-400, 2 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 123-124; Geol. Centralbl., XII, 598; Sci. Progress, III, 469; Rev. crit. Paléozool., XIII, 81.

—— 1908 C

North American plesiosaurs: *Trinacromerum.*

Jour. Geol., XVI, 715-736, figs. 1-15.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, I, Ref., 441-442; Geol. Centralbl., XIII, 244-245; Rev. crit. Paléozool., XIII, 81.

—— 1908 D

Lysorophus, a Permian urodele.

Biol. Bull., XV, 229-240, figs. 1-5.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1909, II, Ref., 124-125; Rev. crit. Paléozool., XIII, 82; Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 159.

—— 1908 E

The evolution and distribution of the plesiosaurs.

Science (n.s.), XXVII, 726-727.

—— 1908 F

A new group of Permian amphibians.

Science (n.s.), XXVIII, 316, 317.

—— 1908 G

The fossil turtles of North America.

Science (n.s.), XXVIII, 803, 804.

A review of Hay, O. P., 1908 A.

—— 1908 H

[Extract from letter sent to W. J. Holland about mosasaurs.]

Ann. Carnegie Mus., IV, 163-164.

—— 1908 I

Pelycosauria of North America.

Amer. Naturalist, XLII, 628-629.

Review and criticism of Case, E. C., 1907 E.

—— 1908 J

The Ankylosauridæ.

Amer. Naturalist, XLII, 629-630.

Review and criticism of Brown, B., 1908 B.

Williston, S. W.—Continued 1909 A

The faunal relations of the early vertebrates.

Jour. Geol., XVII, 389-402.

Reprinted in Bailey Willis and R. D. Salisbury's *"Outlines of Geologic History,"* University of Chicago Press, 1910, pages 163 to 175.

Abstracts in Geol. Centralbl., XV, 214; Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 292; Rev. crit. Paléozool., XV, 24-29; Jahresber. Anat. Entwickl. (N.F.), XV, pt. 3, 157.

—— 1909 B

New or little known Permian vertebrates; *Trematops,* new genus.

Jour. Geol., XVII, 636-658, 7 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 466-467; Geol. Centralbl., XIV, 490; Rev. crit. Paléozool., XIV, 82-84.

—— 1909 C

New or little known Permian vertebrates: *Pariotichus.*

Biol. Bull., XVII, 241-255, 6 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 465-466; Rev. crit. Paléozool., XIV, 84-85.

—— 1909 D

The skull and extremities of *Diplocaulus.*

Trans. Kansas Acad. Sci., XXII, 122-131, plates i-v.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 467-468; Geol. Centralbl., XV, 218.

—— 1909 E

Communications and remarks before American Society of Vertebrate Paleontologists.

Science (n.s.), XXIX, 194, 195, 198.

—— 1910 A

Cacops, Desmospondylus: new genera of Permian vertebrates.

Bull. Geol. Soc. Amer., XXI, 249-284, pls. vi-xvii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 471-473; Geol. Centralbl., XV, 651; Sci. Progress, V, 688-689, pl.; Rev. crit. Paléozool., XV, 31-32.

—— 1910 B

The skull of *Labidosaurus.*

Amer. Jour. Anat., X, 69-81, plates i-iii.

Abstract in Neues Jahrb. Min. Geol. Pal., 1910, II, Ref., 469-470; Jahresber. Anat. Entwickl. (N.F.), XVI, pt. 3, 89.

—— 1910 C

The occurrence of a sauropod dinosaur in the Trinity Cretaceous of Oklahoma. Introductory note.

Jour. Geol., XVIII, 93.

Williston, S. W.—Continued 1910 D

Dissorophus Cope.

Jour. Geol., XVIII, 526-536, pls. i-iii.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 135-137; Geol. Centralbl., XV, 651; Rev. crit. Paléozool., XV, 131; Jahresber. Anat. Entwickl. (N F.), XVIII, pt. 3, 207; Sci. Progress, V, 688, fig.

——— 1910 E

A mounted skeleton of *Platecarpus*.

Jour. Geol., XVIII, 537-541, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 327; Geol. Centralbl., XV, 607; Rev. crit. Paléozool., XV, 149.

——— 1910 F

New Permian reptiles: Rhachitomous vertebræ.

Jour. Geol., XVIII, 585-600, 1 plate, 3 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 130-131; Rev. crit. Paléozool., XV, 149; Sci. Progress, V, 687; Jahresber. Anat. Entwickl. (N F.), XVIII, pt. 3, 207.

——— 1910 G

The birthplace of man.

Pop. Sci. Month., LXXVII, 594-597.

——— 1911 A

Restoration of *Seymouria baylorcnsis* Broili, an American cotylosaur.

Jour. Geol., XIX, 232-237, 1 text-fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 135; Geol. Centralbl., XVIII, 523.

Review in Rev. crit. Paléozool., XVI, 7.

——— 1911 B

American Permian vertebrates.

Univ. Chicago Press, 8vo., 1-145, p's. i-xxxviii, text-figs. 1-32.

Abstracts in Geol. Centralbl., XVII, 706; Sci. Progress, VI, 577; Geol. Mag. (5), IX, 520.

Reviews in Science (n.s.), XXXVI, 216; Rev. crit. Paléozool., XVI, 151-156; Nature, XC, 215.

——— 1911 C

Permian reptiles.

Science (n.s.), XXXIII, 631-632.

For brief notice see Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 135.

——— 1911 D

A new family of reptiles from the Permian of New Mexico.

Amer. Jour. Sci. (4), XXXI, 378-398, figs. 1-7.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, II, Ref., 133-134; Geol. Centralbl., XVII, 430; Sci. Progress, VI, 576.

Review in Rev. crit. Paléozool., XVI, 8.

Williston, S. W.—Continued 1911 E

The wing-finger of pterodactyls, with restoration of *Nyctosaurus*.

Jour. Geol., XIX, 696-705, 4 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 148; Geol. Centralbl., XVII, 705.

Review in Rev. crit. Paléozool., XVI, 236.

——— 1911 F

Review of F. von Huene on *Erythrosuchus* (Huene, F., 1911 D).

Jour. Geol., XIX, 661-664.

——— 1912 A

Restoration of *Limnoscelis*, a cotylosaur reptile from New Mexico.

Amer. Jour. Sci. (4), XXXIV, 457-468, figs. 1-32.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 521; Geol. Centralbl., XIX, 444; Sci. Progress, VIII, 17; Rev. crit. Paléozool., XVII, 76.

——— 1912 B

Primitive reptiles.

Jour. Morphol., XXIII, 637-663, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, I, Ref., 518-520; Sci. Progress, VIII, 17.

——— 1912 C

The Permo-Carboniferous of northern New Mexico.

Jour. Geol., XX, 1-12, 2 text-figs.

——— 1912 D

A review of G. B. Eaton's "Osteology of *Pteranodon*."

Jour. Geol., XX, 288.

——— 1912 E

Symposium on ten years progress in vertebrate paleontology. Evolutionary evidences.

Bull. Geol. Soc. Amer., XXIII, 257-262.

For the other articles of this symposium see the 1912 papers of Matthew, Gidley, Peterson, Gregory, True, Case, Holland, Lull, Hay, Merriam, Dean, Eastman, Osborn, and Sinclair.

——— 1912 F

Review of Karl A. von Zittel's "Grundzüge der Paläontologie"; edition of 1911.

Jour. Geol., XX, 91-93.

——— 1913 A

An ancestral lizard from the Permian of Texas.

Science (n.s.), XXXVIII, 825-826.

Williston, S. W.—Continued 1913 B

The primitive structure of the mandible in amphibians and reptiles.

Jour. Geol., XXI, 625-627, fig. 1.

Brief abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 164; Geol. Zentralbl., XXI, 38.

—— 1913 C

The skulls of *Arœoscelis* and *Casea*, Permian reptiles.

Jour. Geol., XXI, 743-747, figs. 1, 2.

Abstract in Geol. Zentralbl., XXI, 265.

—— 1913 D

Ostodolepis brevispinatus, a new reptile from the Permian of Texas.

Jour. Geol., XXI, 363-366, 2 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, I, Ref., 150; Geol. Centralbl., XX, 704.

—— 1913 E

"The skeleton of *Ornithodesmus latidens*." By R. W. Hooley.

Jour. Geol., XXI, 754-756.

A review of the paper, Hooley, R. W., 1913 A.

—— 1914 A

Water reptiles of the past and present.

Univ. Chicago Press, vii+1-251 pages, 131 figs.

Reviewed in Science (n s.), XLI, 391-392; Nature, London, XCV, 3; Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 281-282; Sci. Progress, IX, 715; Ann. Mag. Nat. Hist. (8), XVIII, 502; Jour. Geol., XXXIII, 1915, 94.

Abstract in Geol. Mag. (6), II, 37-38.

—— 1914 B

Broiliellus, a new genus of amphibians from the Permian of Texas.

Jour. Geol., XXII, 49-56, 3 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., pp. 474-475; Geol. Zentralbl., XXI, 622.

—— 1914 C

Restorations of some American Permocarboniferous amphibians and reptiles.

Jour. Geol., XXII, 57-70, 11 figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 475.

—— 1914 D

The osteology of some American Permian vertebrates. I.

Jour. Geol. XXII, 364-419, 19 text-figs.

See also Contrib. Walker Mus., I, 107-162, 19 figs. Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, I, 269-272.

Williston, S. W.—Continued 1914 E

American Permocarboniferous reptiles and amphibians.

C. R. Congr. internat. Zool., Monaco, 1913, 120-121.

—— 1915 A

New genera of Permian reptiles.

Amer. Jour. Sci. (4), XXXIX, 575-579, 2 figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1916, I, 272-273.

Abstract in Geol. Zentralbl., XXV, 467.

—— 1915 B

Trimerorhachis, a Permian temnospondyl amphibian.

Jour. Geol., XXIII, 246-255, 6 figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 288-289.

—— 1915 C

A new genus and species of American Theromorpha, *Mycterosaurus longiceps*.

Jour. Geol., XXIII, 554-559, 4 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1916, I, 273-274.

—— 1915 D

The first discovery of dinosaurs.

Amer. Mus. Nat. Hist. Handbook series No. 5, New York, 124-131, fig. 44.

—— 1916 A

The osteology of some American Permian vertebrates. II.

Contrib. Walker Mus., I, 165-192, text-figs. 20-37.

Abstract in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 221-223.

—— 1916 B

Synopsis of the American Permocarboniferous Tetrapoda.

Contrib. Walker Mus., I, 193-236, text-figs. 38-84.

Abstracts in Nature, XCVIII, 356; Neues Jahrb. Min. Geol. Pal., 1918, Ref., 217-220.

—— 1916 C

The skeleton of *Trimerorhachis*.

Jour. Geol., XXIV, 291-297, 3 text-figs.

Abstract in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 220.

—— 1916 D

Origin of the sternum in the reptiles and mammals (Abstract).

Bull. Geol. Soc. Amer., XXVII, 152.

—— 1917 A

Labidosaurus Cope, a Lower Permian cotylosaur reptile from Texas.

Jour. Geol., XXV, 309-321; 9 figs. Reprinted in Contrib. Walker Mus., II, 45-47, 1917.

Williston, S. W.—Continued 1917 B

Sphenacodon Marsh, a Permocarboniferous theromorph reptile from New Mexico.

Proc. Nat. Acad. Sci., II, 650-654, 1 fig.

—— 1917 C

The phylogeny and classification of reptiles.

Jour. Geol., XXV, 411-421, 5 figs. Reprinted in Contrib. Walker Mus., II, 61-71, figs. 1-5, 1917.

Abstract in Geol. Mag. (6), V, 374-375.

—— 1917 D

Comments on nomenclature of skull elements of Permian Tetropoda.

Bull. Geol. Soc. Amer., XXVIII, 985-986.

—— 1918 A

The evolution of vertebræ.

Contrib. Walker Mus., II, 75-85, 6 text-figs.

Abstract in Bull. Geol. Soc. Amer., XXIX, 146.

—— 1918 B

The osteology of some American Permian vertebrates. III.

Contrib. Walker Mus., II, 87-112, pls. iii, iv, text-figs. 7-19.

—— 1925 A

The osteology of the reptiles. Part I: The skeleton of reptiles.

Pages 1-201, figs. 1-159.

Arranged and edited by William King Gregory, 8vo., i-xiii+1-300 pages, 191 figs.

—— 1925 B

The osteology of reptiles. Part II: The classification and range of reptiles. Pages 205-300, figs. 160-191.

Reviews in Amer. Naturalist, LX, 96-98; Jour. Geol., XXXIV, 92; Geol. Mag., LXIII, 227; Amer. Jour. Sci. (5), XI, 96; Nature, CXVII, 509.

——, and E. C. **Case** 1892 A

Kansas mosasaurs.

Kansas Univ. Quart., I, 15-32, pls. ii-vi.

Gives list of species, and describes the osteology of *Clidastes velox* and *C. westii* n. sp.

—— —— 1912 A

The Permo-Carboniferous of northern New Mexico.

Jour. Geol., XX, 1-12, 2 figs.

Abstract in Geol. Centralbl., XVII, 701-702.

Williston, S. W., and E. C. **Case**—Continued 1913 A

Description of the vertebrate-bearing beds of north-central New Mexico.

Publ. Carnegie Instn. Wash., No. 181, 1-6, 2 figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 154; Sci. Progress, VIII, 650; Amer. Jour. Sci. (4), XXXVII, 117.

—— —— 1913 B

Description of a nearly complete skeleton of *Ophiacodon* Marsh.

Publ. Carnegie Instn. Wash., No. 181, 37-59, pl. i, text-figs. 23-36.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 156-158; Amer. Jour. Sci. (4), XXXVII, 118.

—— —— 1913 C

A description of *Scoliomus puercensis*, new genus and species.

Publ. Carnegie Instn. Wash., No. 181, 60, fig. 37.

—— —— 1913 D

A description of *Edaphosaurus* Cope.

Publ. Carnegie Instn. Wash., No. 181, 71-81, figs. 46-51.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1914, II, Ref., 158-159; Amer. Jour. Sci. (4), XXXVIII, 119.

——, and R. L. **Moodie** 1913 A

New plesiosaurian genus from the Niobrara Cretaceous of Nebraska (Abstract).

Bull. Geol. Soc. Amer., XXIV, 120-121.

—— —— 1917 A

Ogmodirus martinii, a new plesiosaur from the Cretaceous of Kansas.

Kan. Univ. Sci. Bull., X, 61-73, pls. i-v, 3 text-figs.

Abstract in Rev. crit. Paléozool., XXIV, 89-90.

See also **Case** and **Williston**.

Wills, Leonard J. 1916 A

The structure of the lower jaw of Triassic labyrinthodonts.

Proc. Birmingh. Nat. Hist. Soc., XIV, 5-20, pls. ii, iii, 11 text-figs.

Abstract in Rev. crit. Paléozool., XXIV, 101.

Wilser, J. L. 1923 A

Pygopterus crecelii n. sp.

Ber. naturf. Ges. Freiburg, XXIII, 2, 68-78, 1 fig.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1925, I, pt. 3, 383; Rev. crit. Paléozool., XXVIII, 102.

Wilson, Charles Woodruff 1914 A

Development and histology of the integument of the nine-banded armadillo (*Tatusia novemcincta*).

Bull. Univ. Texas, No. CCCVIII (Sci. ser. XXVI), 1-18, pls. i-x.

The bibliography presents titles of 13 works on the subject.

Wilson, Thomas 1892 A

Man and the mylodon. Their possible contemporaneous existence in the Mississippi Valley.

Amer. Naturalist, XXVI, 628-631.

—— 1901 A

La haute ancienneté de l'homme dans l'Amérique du Nord.

L'Anthropologie, XII, 1900, 297-367, 31 figs.

Wiman, Carl 1905 A

Vorläufige Mitteilung über die alttertiären Vertebraten der Seymourinsel.

Bull. Geol. Instn. Upsala, VI, 247-253, pl. xii.

—— 1910 A

Ein paar Labyrinthodontenreste aus der Trias Spitzbergens.

Bull. Geol. Instn. Upsala, IX, 34-40, pl. ii, 2 text-figs.

—— 1910 B

Ichthyosaurier aus der Trias Spitzbergens.

Bull. Geol. Instn. Upsala, X, 124-148, pls. v-x, 6 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1911, I, Ref., 317-318; Sci. Progress, VI, 574.

Review in Rev. crit. Paléozool., XVI, 227.

—— 1912 A

Über *Mixosaurus cornalianus* Bass sp.

Bull. Geol. Instn. Upsala, XI, 230-241, pl. xi, 2 text-figs.

There is a bibliography of 18 titles.

Abstract in Geol. Centralbl., XVII, 478.

—— 1913 A

Über die paläontologische Bedeutung des Massensterbens unter den Tieren.

Palaeont. Zeitschr., I, 145-154.

Abstract in Geol. Centralbl., XX, 228-229.

—— 1914 A

Über das Hinterhaupt der Labyrinthodonten.

Bull. Geol. Instn. Upsala, XII, 1-8, 8 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1913, II, Ref., 349-350; Geol. Centralbl., XIX, 316.

Wiman, Carl—Continued 1915 A

Über die Stegocephalen aus der Trias Spitzbergens.

Bull. Geol. Instn. Upsala, XIII, 1-34, pls. i-ix, 10 text-figs.

Reviewed in Neues Jahrb. Min. Geol. Pal., 1915, II, Ref., 286-287.

Abstract in Rev. crit. Paléozool., XXIV, 45.

—— 1916 A

Notes on the marine Triassic reptile fauna of Spitzbergen.

Bull. Dept. Geol. Univ. Calif., X, 63-73, 5 text-figs.

Abstract in Geol. Zentralbl., XXIII, 121.

—— 1916 B

Neue Stegocephalenfunde aus dem Posidonomyaschiefer Spitzbergens.

Bull. Geol. Instn. Upsala, XIII, 209-222, pls. xv, xvi, 4 text-figs.

The bibliography presents 11 titles. Abstract in Neues Jahrb. Min. Geol. Pal., 1916, II, 131-132; Rev. crit. Paléozool., XXIV, 46.

—— 1916 C

Ein Plesiosaurierwirbel aus der Trias Spitzbergens.

Bull. Geol. Instn. Upsala, XIII, 223-226, 4 figs.

—— 1916 D

How the mammal came into existence.

Bull. Geol. Instn. Upsala, XIII, 413-414.

—— 1917 A

Über die Stegocephalen *Tertrema* und *Longorhynchus*.

Bull. Geol. Instn. Upsala, XIV, 229-240, pls. xi-xiii, 8 text-figs.

The bibliography presents 14 titles.

Abstract in Neues Jahrb. Min. Geol. Pal., 1918, Ref., 221.

—— 1918 A

Ein Archosaurier aus der Trias Spitzbergens.

Bull. Geol. Instn. Upsala, XVI, 81-85, 4 figs.

There is a bibliography with 9 titles.

—— 1918 B

Über Gehirn und Sinnesorgane bei *Trematapis*.

Bull. Geol. Instn. Upsala, XVI, 86-95, 5 figs.

There are cited 12 works bearing on the subject.

Abstract in Geol. Zentralbl., XXIII, 478.

—— 1920 A

Some reptiles from the Niobrara group in Kansas.

Bull. Geol. Instn. Upsala, XVIII, 9-18, pls. ii-iv, 9 text-figs.

Abstracts in Rev. crit. Paléozool., XXV, 57; Geol. Zentralbl., XXV, 467.

Wiman, Carl—Continued 1921 A

Ueber den Beckengürtel bei *Stenopterygius quadricissus*.

Bull. Geol. Instn. Upsala, XVIII, 19-31, pl. v, 8 text-figs.

The bibliography comprises 15 titles.

Abstract in Geol. Zentralbl., XXVII, 477.

—— 1922 A

Ueber den Beckengürtel bei *Stenopterygius quadricissus*.

Palaeont. Zeitschr., IV, 118-119.

—— 1923 A

Discussion on *Desmostylus*.

Palaeont. Zeitschr., V, 225.

—— 1923 B

Über den Beckengürtel der Triasichthyosaurier.

Pa'aeont. Zeitschr., V, 272-276, 3 figs.

There is a list of 5 papers.

Abstract in Geol. Zentralbl., XXXII, 119.

—— 1924 A

Aus dem Leben der Flugsaurier.

Bull. Geol. Instn. Upsala, XIX, 115-127, 1 fig.

There are 13 titles in the bibliography.

Abstracts in Rev. crit. Paléozool., XXVIII, 104, 1924; Geol. Zentralbl., XXX, 540.

—— 1925 A

Ueber *Pterodactylus westmani* und andere Flugsaurier.

Bull. Geol. Instn. Upsala, XX, 1-38, 2 pls., 23 text-figs.

The bibliography presents 25 titles.

Abstract in Geol. Zentralbl., XXXII, 348.

—— 1925 B

Über einige Flugsaurier.

Palaeont. Zeitschr., VII, 15-20, 1 fig.

Followed by Spillman, Abel, Pompeckj, and Reck in discussion.

Winans, Walter 1916 A

[Letter on Gilmore's restoration of extinct reptiles.]

Scient. Amer. Suppl., No. 2098, 187.

Winchell, Alexander 1861 A

First biennial report of the progress of the geological survey of Michigan embracing observations on the geology, zoology, and botany of the lower peninsula. Lansing, 1861.

—— 1870 A

Notes on some Post-Tertiary phenomena in Michigan.

Amer. Naturalist, IV, 504-505.

Read at the Amer. Assoc. Adv. Sci. at Troy. Records finding of *Castoroides*, mammoth and mastodon.

Winchell, Newton H. 1874 A

Report on the geology of Crawford County [Ohio].

Geol. Surv. Ohio, II, pt. 1, 236-252, with map.

—— 1874 B

Report on the geology of Putnam County [Ohio].

Geol. Surv. Ohio, II, pt. i, 388-396, and map.

—— 1878 A

Primitive man at Little Falls.

Rep. Geol. Nat. Hist. Surv. Minn., VI, 53-64.

Contains mention of mastodon and elephant.

—— 1880 A

Castoroides ohioensis Foster.

Rep. Geol. Nat. Hist. Surv. Minn., VIII, 181-183, with plates.

—— 1882 A

The Museum [of University of Minnesota].

Rep. Geol. Nat. Hist. Surv. Minn., X, 145-148.

Elephant's teeth from Montana.

—— 1885 A

Fossil elephant in Winona County [Minn.].

Rep. Geol. Nat. Hist. Surv. Minn., XIII, 147-149.

—— 1888 A

The geology of Hennepin County [Minn.].

Final Rep. Geol. Surv. Minn., II, 264-344, with map and plates.

On page 306 is account of remains of *Castoroides ohioensis*.

—— 1888 B

Mastodon and man in Washington County [Minn.].

Final Rep. Geol. Surv. Minn., II, 397-398.

Tusk of mastodon supposed to be associated with pottery.

—— 1903 A

Was man in America in the Glacial period?

Bull. Geol. Soc. Amer., XIV, 133-152, 1 text-fig.

—— 1905 A

Review of papers by Netta C. Anderson and Johann A. Udden.

Amer. Geologist, XXXVI, 258-261.

Winchell, Newton H.—Cont'd 1907 A

Pre-Indian inhabitants of North America.

Records of the Past, VI, 145-157; 163-181, with illustrations.

A bibliography appended cites the writings of 23 authors.

—— 1910 A

Extinct Pleistocene mammals of Minnesota.

Bull. Minn. Acad. Nat. Sci., IV, 414-422, pls. x, xi.

Abstract in Geol. Centralbl., XVII, 37.

—— 1917 A

The antiquity of man in America compared with Europe.

Bull. Minn. Acad. Sci., V, 121-151, 20 text-figs., and a prefatory note by the officers of the Academy.

Winckler, T. C. 1871 B

Mémoire sur le *Belonostomus pygmæus* et deux espèces de *Caturus*.

Arch. Mus. Teyler, III, 173-186, 1 pl.

—— 1876 A

Mémoire sur quelques restes de poissons du system heersien.

Arch. Mus. Teyler, IV, 1-15, pls. i, ii.

Wincza, H. 1890 A

Über ein transitorisches Rudiment einer knöchernen Clavicula bei Embryonen eines Ungulaten.

Morphol. Jahrb. XVI, 647-651, pl. xxiv.

Windle, Bertram, C. A. 1890 A

On some cranial and dental characters of the domestic dog.

Proc. Zool. Soc. Lond., 1890, 5-29.

—— 1905 A

Einige neuere Beobachtungen über Fingerabnormitäten. Polydactylie, Hyperphalangie.

Anat. Hefte. Ergebn., XIV, 1049-1065.

The bibliography presents 45 titles.

Winge, Herluf 1895 A

See Hay, O. P., 1902 A, page 242.

Abstract by Schlosser in Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 507-509.

—— 1896 A

Carnivores fossiles et vivants de Lagoa Santa, Minas Géraës, Brésil.

E. Mus. Lund., II, pt. IV, 105-130.

—— 1904 A

Om jordfundne Pattedyr fra Danmark.

Vid. Medd. nat. For. Kjobenh., 1904, 193-304, pls. vii-xiii.

Winge, Herluf—Continued 1906 A

Jordfunde og nulevende Hovdyr (Ungulata) fra Lagoa Santa, Minas Geraes, Brasilien, Med Udsigt over Hovdyrenes indbyrdes-Slaegtskab.

E. Mus. Lund., III, pt. 1, 1-239.

There are numerous references to the literature of the subject.

Abstract in Neues Jahrb. Min. Geol. Pal., 1907, II, 134-136.

—— 1910 A

Om *Plesiocetus* og *Squalodon* fra Danmark.

Vid. Medd. nat. For. Kjobenh., 1909 (1910), 1-38, pls. i, ii.

Abstract in Geol. Centralbl., XVI, 116.

—— 1915 A

Jordfunde og nulevende Gumlere (Edentata) fra Lagoa Santa, Minas Geraes, Brasilien. Med Udsigt over Gumlernes indbyrdes Slaegtskab.

E. Mus. Lundii, III, pt. 2, 1-321, pls. i-xlii.

On pages 261-313 are found notes and references to the works of authors who have written on the subject.

—— 1917 A

Udsigt over Insectaedernes indbyrdes Slaegtskab.

Vid. Medd. nat. For. Kjobenh., LXVIII, 83-203.

There are numerous references to the literature of the subject.

—— 1919 A

Udsigt over Hvalernes Slaegtskab.

Vid. Medd. nat. For. Kjobenh., LXX, 59-142.

There are copious citations of the literature of the subject. See Winge and Miller, 1921 A.

—— 1923 A

Pattedyr-Slaegter. I: Monotremata, Marsupialia, Insectivora, Chiroptera, Edentata.

Copenhagen, 1923, i-viii+1-360 pages, pl. iii.

There are numerous references to the literature of the subject.

—— 1924 A

Pattedyr-Slaegter. II: Rodentia, Carnivora, Primates.

8vo., Copenhagen, 1-321 pages.

Pages 92 to 172, 214 to 241, 279 to 309 are occupied by notes and by abstracts of the systematic literature.

Winge, Herluf, and G. S. **Miller**—Continued 1921 A

A review of the interrelationships of the Cetacea.

Smithson. Misc. Coll., LXXII, No. 8, 1-97.

A translation, made by Gerrit S. Miller, of Winge's paper "Udsigt over Hvalernes indbyrdes Slaegtskab." Winge's paper was published, 1918, in Vid. Medd. nat. For. Kjobenh., vol. LXX, 59-142 (Winge H., 1919 A). In the "Notes," pages 47-93, are numerous references to the literature.

Reviewed in Jour. Mamm., II, 240.

Winslow, C. F. 1875 A

Remarks on fossil mammalian remains in San Francisco.

Proc. Calif. Acad. Sci. (1), VI, 141.

Winslow, Guy Monroe 1898 A

The chondrocranium in the Ichthyopsida.

Tufts Coll. Stud., No. 5, 147-201, pls. i-iv.

There is a bibliography of 72 titles.

Winton, W. E. de 1897 A

Remarks on the existing forms of giraffe.

Proc. Zool. Soc. Lond., 1897, 273-283, figs. 1-4.

With numerous citations of the literature.

Wintrebert, P. 1910 A

Sur le déterminisme de la métamorphose chez les amphibiens.

C. R. Soc. Biol., LXVIII.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, 89-91, 300-302, 419-420, 1081-1083.

—— 1910 B

Sur le déterminisme de la métamorphose chez les batraciens.

C. R. Soc. Biol., LXIX, 78-80, 129-131, 172-174, 226-228.

Abstract in Jahresber. Anat. Entwickl. (N.F.), XVI, 89-91.

Wissler, Clark 1916 A

The present status of the antiquity of man in North America.

Scient. Monthly, II, 234-238.

Witter, F. M. 1880 A

Some geological features near Muscatine.

Proc. Iowa Acad. Sci., 1875-1880, 16.

Read May 24, 1878. Mentions finding of almost entire remains of *Rangifer caribou* in the loess at Muscatine.

—— 1890 A

Some additional observations on the loess in and about Muscatine.

Proc. Iowa Acad. Sci., 1887 (1889), 45.

Witter, F. M.—Continued 1892 A

Notice of arrow points from the loess in the city of Muscatine.

Proc. Iowa Acad. Sci., 1890-91, 66-68.

Mentions finding of remains of two American reindeer and the antlers of some species of deer in loess; also tooth of elephant.

—— 1892 B

Arrow points from the loess at Muscatine, Iowa.

Amer. Geologist, IX, 276-277.

Wood, Horace Elmer 1923 A

The problem of the *Uintatherium* molars.

Bull. Amer. Mus. Nat. Hist., XLVIII, 599-604, 4 figs.

Abstract in Geol. Zentralbl., XXX, 440.

—— 1924 A

The position of the "sparassodonts": with notes on the relationships and history of the Marsupialia.

Bull. Amer. Nat. Hist., LI, 77-101, 2 tab'es, 57 figs.

The bibliography contains 21 titles.

—— 1926 A

Some early Tertiary rhinoceroses and hyracodonts.

Bull. Geol. Soc. Amer., XXXVII, 238-239 (Abstract).

—— 1927 A

Hoplophoneus mentalis, and cusp homologies in cats.

Jour. Mamm., VIII, 296-302.

The bibliography presents 28 titles.

—— 1927 B

Some early Tertiary rhinoceroses and hyracodonts.

Bull. Amer. Pal., XIII (No. 50), 3-89, pls. i-vii, 8 tables.

The bibliography presents 74 titles.

Wood, Norman A. 1914 A

Two undescribed specimens of *Castoroides ohioensis* Foster from Michigan.

Science (n.s.), XXXIX, 759.

Woodhull, A. A. 1872 B

Discovery of the tusk of an elephant in Colorado.

Amer. Jour. Sci. (3), III, 373-374.

See Berthoud, E. L., 1872 A.

Wood-Jones, F. 1920 A

Discussion on the zoological position and affinities of *Tarsius.*

Proc. Zool. Soc. Lond., 1919 (1920), 491-494.

Woodruff, Elmer Grant 1906 A

The geology of Cass County, Nebraska.

Neb. Geol. Surv., II, 169-292, pls. i-xx, 33 text-figs.

A list of the remains of sharks is presented and figures of most of them.

Woodward, A. Smith 1887 B

Abstract in Geol. Mag. (3), IV, 90.

—— 1888 I

Abstract and list in Geol. Mag. (3), V, 139-142.

—— 1888 K

Note on the early Mesozoic ganoid *Belonorhynchus*, and on the supposed Liassic genus *Amblyurus*.

Ann. Mag. Nat. Hist. (6), I, 354-356.

—— 1888 L

On some remains of *Squatina cranei* sp. nov., and the mandible of *Belonostomus cinctus* from the Chalk of Sussex.

Quart. Jour. Geol. Soc., XLIV, 144-148, pl. vii.

—— 1888 M

On two new lepidotid ganoids from the early Mesozoic deposits of Orange Free State, South Africa.

Quart. Jour. Geol. Soc., XLIV, 138-143, 270, pl. vi.

—— 1888 N

Dr. Georg Baur on fossil Chelonia.

Geol. Mag. (3), V, 373.

—— 1888 O

Remarks on a note by G. Baur on the pleurodiran chelonians.

Ann. Mag. Nat. Hist. (6), II, 352-354.

—— 1889 I

Notes on the teeth of sharks and skates from the English Eocene formations.

Proc. Geol. Assoc. XVI, 1-14, pl. i, 2 text-figs.

—— 1889 J

On the so-called Cretaceous lizard, *Rhaphiosaurus*.

Ann. Mag. Nat. Hist. (6), IV, 350-351.

In the bibliography 9 titles are cited.

—— 1889 K

On the occurrence of the Devonian ganoid *Onychodus* in Spitzbergen.

Ann. Mag. Nat. Hist. (6), IV, 407.

Woodward, A. Smith—Cont'd 1890 E

Review of J. S. Newberry's "Triassic fishes and fossil plants of the Triassic rocks of New Jersey and the Connecticut Valley." Newberry, J. S., 1888 A.

Nature, XLII, 366-367.

—— 1890 F

Review of J. S. Newberry's "The palæozoic fishes of North America." Newberry, J. S., 1889 A.

Nature, XLIII, 146-147.

—— 1890 G

The fossil sturgeon of the Whitby Lias.

Naturalist, 1890, 101-107, 8 figs.

—— 1890 H

On two groups of teeth of the Cretaceous selachian fish *Ptychodus*.

Rep. Yorksh. Philos. Soc., 1889 (1890), 38-41, pl. 1.

—— 1891 A

Review in Geol. Mag. (3), VIII, 123-129.

—— 1891 E

The hybodont and cestraciont sharks of the Cretaceous period.

Proc. Yorksh. Geol. Polyt. Soc. (n.s.), XII, 62-68, pls. i, ii.

—— 1891 F

The Devonian fish-fauna of Spitzbergen.

Ann. Mag. Nat. Hist. (6), VIII, 1-15, pls. i-iii.

—— 1891 G

Pholidophorus germanicus: An addition to the fish fauna of the Upper Lias of Whitby.

Geol. Mag. (3), VIII, 545-546.

—— 1892 H

Doubly armoured herrings.

Ann. Mag. Nat. Hist. (6), X, 412-413.

—— 1892 I

Description of the Cretaceous sawfish *Sclerorhynchus atavus*.

Geol. Mag. (3), IX, 429-534, 1 fig.

—— 1893 F

Some Cretaceous fishes.

Ann. Mag. Nat. Hist. (3), X, 433-436, 487-493, plates xvi, xvii.

Woodward, A. Smith—Cont'd 1894 C
On some fish-remains of the genera *Portheus* and *Cladocyclus* from the Rolling Downs formation (Lower Cretaceous) of Queensland.
Ann. Mag. Nat. Hist. (6), XIV, 444-447.
Abstract in Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 329.

—— 1895 F
On the development of the teeth in certain Insectivora (Abstract).
Rep. Brit. Assoc. Adv. Sci., LXV, Ipswich, 1895, 736.

—— 1895 G
A synopsis of the remains of ganoid fishes from the Cambridge Greensand.
Geol. Mag. (4), II, 207-214, pl. viii, 4 text-figs.

—— 1896 D
On the quadrate bone of a gigantic pterodactyl discovered in the Cretaceous of Bahia, Brazil.
Ann. Mag. Nat. Hist. (6), XVII, 255-257.

—— 1896 E
Note on the affinities of the English Wealden fish-fauna.
Geol. Mag. (4), III, 69-71.

—— 1897 B
The ostracoderms of Professor Cope.
Nat. Sci., XI, 144.

—— 1897 C
Edward Drinker Cope.
Nat. Sci., X, 377-381, with portrait.

—— 1897 D
On a new specimen of stegocephalan, *Ceraterpeton galvani* Huxley, from the Coal measures of Castlecomer, Kilkenny, Ireland.
Geol. Mag. (4), IV, 293-298, pl. xii. Abstract in Neues Jahrb. Min. Geol. Pal., 1898, II, Ref., 333.

—— 1897 E
On a new specimen of the Mesozoic ganoid fish *Pholidophorus* from the Oxford Clay of Weymouth.
Proc. Dorset Nat. Hist. Antiquar. Field Club, XVIII, 150-152, with plate.

—— 1898 B
Reviewed in Sci. Progress, VII, App., xli-xlv; Geol. Mag. (4), V, 367-373.

—— 1898 C
The antiquity of the deep-sea fish-fauna.
Nat. Sci., XII, 257-260, pl. x.
Abstract in Rev. crit. Paléozool., IV, 111-112.

Woodward, A. Smith—Cont'd 1898 D
The history of the Mammalia in Europe and North America.
Nat. Sci., XII, 328-336.

—— 1898 E
The imperfection of the geological record.
Nat. Sci., XIII, 327-332.

—— 1898 F
Preliminary note on a new specimen of *Squatina* from the lithographic stone of Nusplingen, Würtemberg.
Geol. Mag. (4), V, 289-291, pl. x, 1 text-fig.

—— 1898 G
Note on a Devonian cœlacanth fish.
Geol. Mag. (4), V, 529-531, 1 fig.

—— 1898 H
Notes on some type specimens of Cretaceous fishes from Mount Lebanon, in the Edinburgh Museum of Science.
Ann. Mag. Nat. Hist. (7), II, 405-414.

—— 1899 C
On the Cretaceous fish *Plethodus*.
Ann. Mag. Nat. Hist. (7), III, 353-361, pls. xiii, xiv.

—— 1899 D
The supposed existing ground-sloth of Patagonia.
Nat. Sci., XV, 351-354.

—— 1899 E
Note on *Scapanorhynchus*, a Cretaceous shark apparently surviving in Japanese seas.
Ann. Mag. Nat. Hist. (7), III, 487-489.
Abstract in Rev. crit. Paléozool., IV, 115.

—— 1899 F
A supposed existing ground-sloth in Patagonia.
Geol. Mag. (4), VI, 226-228.

—— 1900 B
Abstract in Geol. Centralbl., I, 603.

—— 1900 E
Report upon fish remains.
Summ. Rep. Geol. Surv. Canada for 1899, 203-204.

—— 1900 F
Helicoprion—spine or tooth?
Geol. Mag. (4), VII, 33-36.

—— 1900 G
On some remains of *Grypotherium (Neomylodon) listai* and associated mammals from a cavern near Consuelo Cave, Last Hope Inlet, Patagonia.
Proc. Zool. Soc. Lond., 1900, 64-79, pls. v-ix.

Woodward, A. Smith—Cont'd 1900 H

Notes on some upper Devonian fish-remains discovered by Prof. A. G. Nathorst in East Greenland.

Bihang svenska Vet. Akad. Handl., XXVI, Afd. IV, No. 10, 1-10, 1 pl.

Abstracts in Geol. Centralbl., X, 729; Rev. crit. Paléozool., IX, 189.

—— 1901 A

Catalogue of the fossil fishes in the British Museum. Part IV: Containing the actinopterygian Teleostomi of the suborders Isospondyli (in part), Ostariophysi, Apodes, Percesoces, Hemibranchii, Acanthopterygii, and Anacanthini.

8vo., i-xxxviii+1-636 pages, pls. i-xix, 22 text-figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1905, II, Ref., 134-136; Geol. Centralbl., II, 667-669.

Review in Rev. crit. Paléozool., VI, 59-65; Geol. Mag. (4), IX, 133-138.

—— 1901 B

On some extinct reptiles from Patagonia, of the genera *Miolania, Dinilysia,* and *Gonyodectes.*

Proc. Zool. Soc. Lond., 1901, 169-184, pls. xv-xx.

—— 1901 C

Notes on fossil fishes found in the Knoydart formation, Nova Scotia.

Bull. Geol. Soc. Amer., XII, 311-312.

—— 1902 A

Description and comparison of the specimen [of *Grypotherium*].

Pritchard's "Through the heart of Patagonia," pp. 305-330; with 2 figures.

Describes and figures the skin of a mylodont found in cave in Patagonia.

—— 1902 B

On two skulls of the ornithosaurian *Rhamphorhynchus.*

Ann. Mag. Nat. Hist. (7), IX, 1-5, pl. i.

—— 1902 C

On an amioid fish *(Megalurus mawsoni* sp. n.) from the Cretaceous of Bahia, Brazil.

Ann. Mag. Nat. Hist. (7), IX, 87-89, pl. ii.

—— 1902 D

Report on fish remains.

Rep. Geol. Surv. Canada, 1899, XII, 203.

Woodward, A. Smith—Cont'd 1902 E

Note sur l'*Helicoprion* et les "édestides."

Bull. Soc. belge Géol. (2), XIII, Proc.-verb., 230-234, fig. 4.

Followed by discussion by Van de Wielle, Kemna, Dubois, and Simoens.

—— 1903 A

The new mammoth at St. Petersburg.

Nature, LXVIII, 297-298, 2 text-figs.

—— 1903 B

The mammoth.

Geol. Mag. (4), X, 361-363.

A review of three papers on the mammoth found on the Beresowka River in Siberia.

—— 1903 C

On the Carboniferous ichthyodorulite *Listracanthus.*

Geol. Mag. (4), X, 486-488, 9 text-figs.

—— 1904 A

On the jaws of *Ptychodus* from the Chalk.

Quart. Jour. Geol. Soc., LX, 133-136, pl. xv, 1 text-fig.

Abstracts in Geol. Centralbl., V, 484; Rev. crit. Paléozool., VIII, 159.

—— 1904 B

On the jaws of *Ptychodus* from the Chalk.

Geol. Mag. (5), I, 139-140.

Abstract of Woodward, A. S., 1904 A.

—— 1904 C

Some recent discoveries concerning the teeth of extinct animals.

Trans. Odont. Soc. G. Brit. (n.s.), XXXVI, 185-198, 6 text-figs.

—— 1904 D

On two new labyrinthodont skulls of the genera *Capitosaurus* and *Aphaneramma.*

Proc. Zool. Soc. Lond., II, 170-176, pls. xi, xii, text figs.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1907, I, Ref., 150; Jahresber. Anat. Entwickl. (N.F.), X, Abth. 3, 162.

—— 1905 A

On parts of the skeleton of *Cetiosaurus leedsi,* a sauropodous dinosaur from the Oxford Clay of Peterborough.

Proc. Zool. Soc. Lond., 1905, I, 232-243, text-figs. 39-49.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1910, I, Ref., 462; Rev. crit. Paléozool., XI, 12.

—— 1906 A

The relations of palæontology to biology.

Ann. Mag. Nat. Hist. (7), XVIII, 312-318.

Abstract in Rev. crit. Paléozool., XI, 95-97.

Woodward, A. Smith—Cont'd 1906 B

On two specimens of Ichthyosaurus showing contained embryos.

Geol. Mag. (5), III, 443-444, pl. xxiv.

Abstracts in Rev. crit. Paléozool., XI, 76; Geol. Centralbl., IX, 137; Sci. Progress, I, 459.

—— 1906 C

The study of fossil fishes.

Proc. Geol. Assoc., XIX, 266-282, figs. 1-15.

Abstracts in Nature, LXXIV, 597-599, figs. 1-3; Geol. Centralbl., VIII, 751-752; Rev. crit. Paléozool., XI, 77-82.

—— 1906 D

On a Carboniferous fish fauna from the Mansfield District, Victoria.

Mem. Nat. Mus. Melbourne, No. 1, 1-32, pls. i-xi, 3 text-figs.

—— 1907 A

Notes on some Upper Cretaceous fish-remains from the provinces of Sergipe and Pernambuco, Brazil.

Geol. Mag. (5), IV, 193-197, pl. vii.

—— 1907 B

On a new dinosaurian reptile (*Scleromochlus taylori* gen. et sp. nov.) from the Trias of Lossiemouth, Elgin.

Quart. Jour. Geol. Soc., LXIII, 140-144, pl. ix, 1 text-fig.

Abstract in Sci. Progress, II, 515.

—— 1907 C

On *Rhynchosaurus articeps* (Owen).

Rep. Brit. Assoc. Adv. Sci., 1903 (1904), York meet., 293-298, pls. i, ii, 1 fig.

—— 1908 A

On some fossil fishes discovered by Prof. Ennes de Souza in the Cretaceous formation at Ilhéos (State of Bahia), Brazil.

Quart. Jour. Geol. Soc., LXIV, 358-362, pls. xlii, xliii.

—— 1909 A

The British Association for the Advancement of Science. Address of the President to the Geological Section.

Science (n.s.), XXX, 321-331.

See also Rep. Brit. Assoc. Adv. Sci., 1909 (1910), LXXIX, 467-471.

—— 1910 A

On a skull of *Megalosaurus* from the Great Oolite of Minchinhampton (Gloucestershire).

Quart. Jour. Geol. Soc., LXVI, 111-115, pl. xiii.

Abstract in Geol. Centralbl., XV, 413.

Woodward, A. Smith—Cont'd 1910 B

Presidential address at meeting of British Association for Advancement of Science, at Winnipeg, Canada.

Rep. Brit. Assoc. Adv. Sci., LXXIX, Winnipeg, 1909, 462-471.

—— 1910 C

Some extinct vertebrate animals from North America.

Nature, LXXXIV, 12-13, 2 figs.

A review of collected papers from the Bull. Amer. Nat. Hist. from 1904-1908 (vol. III).

—— 1910 D

Origin of vertebrates.

Proc. Linn. Soc. Lond., CXXII, 31.

—— 1911 A

On some mammalian teeth from the Wealden of Hastings.

Quart. Jour. Geol. Soc., LXVII, 278-281, 1 text-fig.

Abstract in Nature, LXXXVI, 233.

—— 1911 B

On the upper Devonian ostracoderm *Psammosteus taylori*.

Ann. Mag. Nat. Hist. (8), VIII, 649-652, pl. ix.

Abstracts in Geol. Centralbl., XVIII, 474; Neues Jahrb. Min. Geol. Pal., 1913, I, 164.

—— 1911 C

Fauna of the Carboniferous period.

Proc. Linn. Soc. Lond., sess., CXXIII, 45-46.

Also in Nature, LXXXVI, 541.

—— 1912 A

The fishes of the English chalk.

Palaeontogr. Soc. London, vols. for years 1902, 1903, 1907, 1908, 1909, 1910, 1911.

The parts were issued as follows: Pt. I, 1-56, pls. i-xiii, text-figs. 1-12, in 1902. Pt. II, 57-96, pls. xiv-xx, text-figs. 13-23, in 1903. Pt. III, 97-128, pls. xxi-xxvi, text-figs. 24-38, in 1907. Pt. IV, 129-152, pls. xxvii-xxxii, text-figs. 39-45, in 1908. Pt. V, 153-184, pls. xxxiii-xxxviii, text-figs. 46-55, in 1909. Pt. VI, 185-224, pls. xxxix-xlvi, text-figs. 56-68, in 1911. Pt. VII, 225-264, pls. xlvii-liv, text-figs. 69-79, in 1912.

Abstracts in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 90; Neues Jahrb. Min. Geol. Pal., 1912, II, Ref., 448-452; XVIII, 140-141; Sci. Progress, III, 22.

—— 1912 B

Note on a maxilla of *Triconodon* from the Middle Purbeck beds of Swanage.

Proc. Geol. Assoc., XXIII, 100-101, pl. xv.

Woodward, A. Smith—Cont'd 1912 C

On the snout of a pachycormid fish (*Protosphyræna stebbingi*) from the Lower Chalk of Ferriby, Lincolnshire.

Naturalist, 1912, 329-330, pl. xix.

Abstract in Geol. Centralbl., XIX, 44.

—— 1913 A

On a new specimen of the Cretaceous fish *Portheus molossus* Cope.

Geol. Mag. (5), X, 529-531, pl. xviii.

Abstract in Geol. Zentralbl., XXI, 267.

—— 1913 B

Note on fish remains from the Upper Devonian.

Quart. Jour. Geol. Soc., LXIX, 81-83, pl. x.

Abstract in Neues Jahrb. Min. Geol. Pal., 1923, I, 455.

—— 1915 A

On the skull of an extinct mammal related to *Æluropus* from a cave in the ruby mines at Mogok, Burma.

Proc. Zool. Soc. Lond., 1915, 425-428, pl. i, 1 text-fig.

—— 1915 B

The use of fishes in stratigraphical geology.

Quart. Jour. Geol. Soc., LXXI, lxii-lxxv.

Abstract in Geol. Zentralbl., XXVI, 253.

—— 1916 A

On a mandibular ramus from an Upper Cretaceous formation in Alberta, Canada.

Proc. Zool. Soc. Lond., 1916, abstract 158, 30.

Describes *Cimolestes cutleri* n. sp.

—— 1916 B

On a mammalian mandible (*Cimolestes cutleri*) from an Upper Cretaceous formation in Alberta, Canada.

Proc. Zool. Soc. Lond., 1916, 525-528.

—— 1917 A

Note on *Plectrodus*, the jaw of an Upper Silurian fish.

Geol. Mag. (6), IV, 74-75.

Abstract in Geol. Zentralbl., XXVI, 381.

—— 1917 B

Notes on the pycnodont fishes.

Geol. Mag. (6), IV, 385-389, pl. xxiv, 1 text-fig.

Abstracts in Geol. Zentralbl., XXVI, 381; Sci. Progress, XII, 421.

—— 1917 C

The so-called coprolites of ichthyosaurians and labyrinthodonts.

Geol. Mag. (6), IV, 540-542, pl. xxxiv, 1 text-fig.

Abstract in Geol. Zentralbl., XXVI, 379.

Woodward, A. Smith—Cont'd 1917 D

The use of the higher vertebrates in stratigraphical geology.

Quart. Jour. Geol. Soc., LXXII, Proc., lxv-lxxvi.

Abstract in Nature, XCVII, 93.

—— 1917 E

Exhibition of specimen of *Cœlorhynchus* from Nigeria.

Quart. Jour. Geol. Soc., LXXII, Proc., lxxviii.

—— 1917 F

On a new species of *Edestus* from the Upper Carboniferous of Yorkshire.

Quart. Jour. Geol. Soc., LXXII, 1-5, 6, pl. i, 4 text-figs.

Description of *Edestus newtoni*.

For preliminary description see Nature, XCVIII, 162; Geol. Mag. Lond. (6), III, 381.

Abstracts in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 351; Geol. Zentralbl., XXVI, 123; Sci. Progress, XII, 420.

—— 1917 G

Devonian fish-remains from Australia and the Antarctic regions.

Quart. Jour. Geol. Soc., LXXII, lxxix-lxxx.

—— 1918 A

Rostral teeth of *Eopristis* and *Pristis*.

Proc. Zool. Soc. Lond., 1918, 194-195.

—— 1919 A

The fossil fishes of the English Wealden and Purbeck formations.

Palaeontogr. Soc. London, vol. for 1917, 1-148, pls. i-xxvi and 41 text-figs.

The parts were issued as follows: Pt. I, 1-48, pls. i-x, Oct., 1916. Pt. II, 49-104, pls. xi-xx, Feb., 1918. Pt. III, i-viii, 105-148, pls. xxi-xxvi, Apr. 1919.

Abstract of Pt. II in Geol. Mag. (6), V, 417.

—— 1919 B

On the dentition of the petalodont shark *Climaxodus*.

Geol. Mag. (6), VI, 379-380.

—— 1920 A

American fossil vertebrate animals.

Nature, CV, 117-118, 1 fig.

—— 1920 B

On the dentition of the petalodont shark *Climaxodus*.

Quart. Jour. Geol. Soc., LXXV, 1-5, pl. i.

Abstract in Neues Jahrb. Min. Geol. Pal., 1921, I, Ref., 352.

—— 1920 C

Discussion on the zoological position and affinities of *Tarsius*.

Proc. Zool. Soc. Lond., 1919 (1920), 465.

Woodward, A. Smith—Cont'd 1920 D
On certain groups of fossil fishes.
Proc. Linn. Soc. Lond., sess. CXXXII, 25-34, 4 figs.
Bibliography in footnotes.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, I, 454.

—— 1921 A
Recent progress in the study of fossil fishes.
Proc. Geol. Assoc., XXXII, 179-181, figs. 20, 21.

—— 1921 B
Observations on some extinct elasmobranch fishes.
Proc. Linn. Soc. Lond., sess. CXXXIII, 29-39, 4 figs.
Abstracts in Geol. Zentralbl., XXVII, 363; Neues Jahrb. Min. Geol. Pal., 1923, I, 453.

—— 1921 C
Visit to the gallery of fossil fishes. British Museum (Natural History).
Proc. Geol. Assoc., XXXII, 179-181, 2 figs.

—— 1922 A
A supposed ancestral man in North America.
Nature, CIX, 750.

—— 1922 B
Observations on crossopterygian and arthrodiran fishes.
Proc. Linn. Soc. Lond., sess. CXXXIV, 27-36, 5 figs.
The bibliography is in footnotes.
Abstract in Neues Jahrb. Min. Geol. Pal., 1923, I, 453.

—— 1922 C
A guide to the fossil reptiles, amphibians, and fishes in the department of geology and palæontology in the British Museum of Natural History.
London, 10th ed., i-xvi+1-112 pages, 8 pls., 117 text-figs.
Abstract in Rev. crit. Paléozool., XXVII, 219.

—— 1923 A
Presidential address. Palæontology and Evolution.
Proc. Linn. Soc. Lond., CXXXV, 27-34, 4 figs.

—— 1923 B
On a new fossil fish (*Anogmius ornatus* sp. nov.) from the Lower Chalk of South Ferriby, Lincolnshire.
Naturalist, Sept., 1923, 297-300, 1 fig.

Woodward, A. Smith—Cont'd 1923 C
A guide to the fossil mammals and birds in the department of geology and palæontology in the British Museum (Natural History).
Pages 1-96, 6 pls., 86 text-figs.

—— 1924 A
The animals of the Carboniferous period, with special reference to the discoveries in Yorkshire.
Naturalist, 1924, 105-117, 8 figs.

—— 1924 B
On a hybodont shark (*Tristychius*) from the Calciferous sandstone series of Eskdale (Dumfries-shire).
Quart. Jour. Geol. Soc., LXXXI, 338-342, 1 fig.
Abstracts in Geol. Zentralbl., XXX., 416; Neues Jahrb. Min. Geol. Pal., 1925, I, 283.

—— 1925 A
The oldest fossil fishes.
Nature, CXV, 124-125, 3 figs.

——, and B. **Petronievics**
See **Petronievics** and **Woodward**.

——, and C. D. **Sherborn** 1891 A
A catalogue of British fossil Vertebrata. Supplement for 1890.
Geol. Mag. (3), VIII, 25-34.

——, and Errol Ivor **White** 1926 A
The fossil fishes of the Old Red sandstone of the Shetland Isles.
Trans. Roy. Soc. Edinb., LIV, 567-572, pl. liv.
The bibliography presents 17 titles.

Woodward, Henry 1878 A
On some armoured fishes.
Pop. Sci. Review, XVII (n.s. II), 1-23, pls. i, ii.

—— 1904 A
A retrospect of palæontology in the last forty years.
Geol. Mag. (5), I, 1-6, 49-56, 97-106, 145-157.

—— 1904 B
The evolution of vertebrate animals in time.
Jour. Roy. Micr. Soc., 1904, 137-164.

—— 1906 A
A large-headed dinosaur.
Nature, LXXIII, 228-229, 1 fig.
Abstract in Geol. Zentralbl., VII, 662.

—— 1915 A
Eminent geologists. Arthur Smith Woodward.
Geol. Mag. (6), II, 1-5, with portrait.

Woodward, M. F. 1894 B

On the succession and genesis of mammalian teeth.

Sci. Progress, I, 438-453.

The bibliography presents titles of 51 works.

Woodworth, Jay Backus 1905 A

Ancient water levels of the Champlain and Hudson valleys.

Bull. N. Y. State Mus., LXXXIV, 67-265, pls. i-xxix, 24 text-figs.

—— 1911 A

Report to Professor F. W. Putnam on the geology of vicinity of Trenton, 1899.

Peabody Mus. Amer. Archæol., V, 237-241.

See **Shaler** and **Woodworth.**

Woolman, Lewis 1897 A

Fossil horse in Fish House Clay, *Equus complicatus* Leidy.

Rep. Geol. Surv. New Jersey for 1896, 208-210, pl. x.

—— 1897 B

Vertebrate and invertebrate fossils and also plant remains at Fish House as noted by Prof. H. Carville Lewis.

Rep. Geol. Surv. New Jersey for 1896, 211-212.

Notes the finding of bones of wolf and of fishes.

—— 1897 C

Bone of a dinosaur, an immense reptile, associated with ammonites and other molluscan fossils in Cretaceous Mattawan clay marls, at Merchantville, N. J.

Rep. Geol. Surv. New Jersey for 1896, 248-250, triple plate XV. Reptile supposed by Cope to be *Ornithotarsus immanis.*

Worthen, A. H. 1866 A

Geology of Illinois; also geology of Randolph, St. Clair, Madison and Hancock Counties.

Geol. Surv. Ill., I, 1-152, 278-349.

—— 1873 A

Geology of Peoria, McDonough, Monroe, Macoupin, and Sangamon Counties [Illinois].

Geol. Surv. Ill., V, 25-319.

—— 1890 A

Drift deposits of Illinois.

Geol. Surv. Ill., VIII, 1-24.

Worthmann, Fritz 1922 A

Zur Mechanik des Kiefergelenks.

Anat. Anz., LV, 305-316, 6 figs.

Wortman, Jacob L. 1895 B

On the so-called devil's corkscrews of Nebraska.

Amer. Naturalist, XXIX, 403.

Regarded the objects as probably roots of some gigantic water plant.

—— 1899 A

Abstract in Geol. Centralbl., I, 636.

—— 1900 A

The new department of vertebrate palæontology of the Carnegie Museum.

Science (n.s.), XI, 163-166.

—— 1901 A

A new American species of *Amphicyon.*

Amer. Jour. Sci. (4), XI, 200-204, figs. A. and B.

Describes *A. americanus* Wortman.

Abstract in Geol. Centralbl., II, 664.

—— 1901 B

Studies of Eocene Mammalia in the Marsh collection, Peabody Museum. Part I: Carnivora.

Amer. Jour. Sci. (4), XI, 333-348, 437-450, XII, 143-154, 193-206, 281-296, 377-382, 421-432, pls. i-viii, 60 text-figs.

Reviewed in Science (n.s.), XIV, 699.

Abstracts in Geol. Centralbl., II, 731, 761; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 446-459.

—— 1901 C

The probable successors of certain North American primates.

Science (n.s.), XIII, 209-211.

—— 1902 A

Studies of Eocene Mammalia in the Marsh collection, Peabody Museum.

Amer. Jour. Sci. (4), XIII, 39-46, 115-128, 197-206, 433-448, pls. ix, x, text-figs. 61-95; XIV, 17-23, with text-figs. 96-99.

Wortman's papers indicated by "1901 A" and "1902 A" were issued also as a pamphlet with its own pagination, as well as with that of the original papers.

Review in Science (n.s.), XIV, 699.

Abstracts in Geol. Centralbl., IV, 476; Neues Jahrb. Min. Geol. Pal., 1904, I, Ref., 446-459; Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 125-126.

—— 1902 B

Fossils mammals of the Tertiary of northeastern Colorado, by W. D. Matthew.

Amer. Jour. Sci. (4), XIII, 476-477.

A review of W. D. Matthew's memoir with the title quoted.

Wortman, Jacob L.—Continued 1903 A
Studies of Eocene Mammalia in the Marsh collection, Peabody Museum. Part II: Primates.
Amer. Jour. Sci. (4), xv, 163-176, text-figs. 100-104, 399-414, 419-436; xvi, 345-368, with pls. xvi, xvii, text-figs. 105-119.
Abstracts in Geol. Centralbl., v, 325; vi, 430; Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 324-336; Rev. crit. Paléozool., x, 137-140.

—— 1904 A
Studies of Eocene Mammalia in the Marsh collection, Peabody Museum.
Amer. Jour. Sci. (4), xvii, 23-33, text-figs. 120-123, 133-140, text-figs. 124-134; 203-214, text-figs. 135-148.
Abstracts in Geol. Centralbl., vi, 430; Neues Jahrb. Min. Geol. Pal., 1905, i, Ref., 324-336; Rev. crit. Paléozool., x, 137-140; Jahresber. Anat. Entwickl. (N.F.), xi, pt. 3, 179-181.

—— 1906 A
A new fossil seal from the marine Miocene of the Oregon coast.
Science (n.s.), xxiv, 89-92.
Discusses Condon's *Desmatophoca oregonensis* and its relationships.
Abstract in Geol. Centralbl., xi, 105.

—— 1920 A
On some hitherto unrecognized reptilian characters in the skull of the Insectivora and other mammals.
Proc. U. S. Nat. Mus., lvii, 1-52, 16 figs.

—— 1921 A
Evolution of molar cusps in mammals.
Amer. Jour. Phys. Anthrop., iv, 177-188.

Wrather, W. E. 1922 A
Dinosaur tracks in Hamilton County, Texas.
Jour. Geol., xxx, 354-360, 5 figs.

Wray, Richard S. 1887 A
On some points in the morphology of the wings of birds.
Proc. Zool. Soc. Lond., 343-357, pls. xxix-xxxii, 2 text-figs.

Wright, Albert A. 1897 A
New evidence upon the structure of *Dinichthys.*
Rep. Ohio Acad. Sci., v, 59-60.

Wright, E. Percival 1878 A
About fishes' tails.
Nature, xvii, 286-288.

—— 1878 B
About fishes' heads.
Nature, xix, 149-151.

Wright, E. Percival, and T. H. **Huxley** 1866 A
On a collection of fossils from the Jarrow Colliery, Kilkenny, Ireland.
Geol. Mag. (1), iii, 165-171.

Wright, Frederick B. 1903 A
The mastodon and mammoth contemporary with man.
Records of the Past, ii, 243-253, 3 plates.

Wright, George F. 1903 A
Distribution of mastodon remains in Ohio.
Science (n.s.), xvii, 297.

—— 1905 A
The physical conditions in North America during man's early occupancy.
Records of the Past, iv, 15-26, 3 text-figs., 6 maps.

—— 1908 A
The influence of the glacial epoch upon the early history of mankind.
Records of the Past, vii, 22-37, 5 text-figs.

—— 1908 B
The latest concerning prehistoric man in California.
Records of the Past, vii, 183-187.

—— 1909 A
Geological facts bearing on the place of the origin of the human race.
Science (n.s.), xxix, 512-513.

—— 1911 A
Glacial man at Trenton, New Jersey.
Records of the Past, x, 273-282, 1 plate, 4 text-figs.

—— 1911 B
The Ice Age in North America and its bearings upon the antiquity of man.
8vo., i-xxi+1-763 pages, 9 plates, 3 maps, 196 text-figs. Biblitheca Sacra Co., Oberlin, Ohio., 5th ed.
Abstract in Geol. Centralbl., xviii, 169.

—— 1911 C
Note on paper by Charles Peabody.
Records of the Past, x, 41-42.

Wright, R. Ramsay 1883 A
Natural history of mammals, Monotremata, Didelphia, Ungulata, Primates.
Stand. Nat. Hist., vol. v, 11-19 (Monotremata); 233-352 (Ungulata); 480-528 (Primates).

Wright, R. Ramsay—Continued 1885 A
On the skull and auditory organ of the siluroid *Hypophthalmus.*
Trans. Roy. Soc. Canada, III, sec. 4, 107-118, pls. viii-x.

Wright, William 1907 A
The morphology and variation of the skull.
Lancet, 1909, I, 669-676.

Wüst, Ewald 1901 A
Das Pliozän und das älteste Pleistozän Thuringens.
Abh. naturf. Ges. Halle., XXIII, 1-356, pls. i-ix.
Followed by 12 pages noting the literature.

—— 1922 A
Beiträge zur Kenntnis der diluvialen Nashörner Europas.
Centralbl. Min. Geol. Pal., 1922, 641-656, 680-688, 5 figs.

Wyckoff, William C. 1874 A
A perilous fossil hunt. Professor Marsh's last trip to the Bad Lands.
New York *Tribune* of December 22, 1874. Reprinted in the type of the American Journal of Science, with pages 1 to 12 and 2 figures.

Wyeth, F. J. 1924 A
The development of the auditory apparatus in *Sphenodon punctatus* with an account of the visceral pouches, aortic arches, and other accessory structures.
Phil. Trans. Roy. Soc. Land., CXII, 259-368, pls. xi-xvii, 16 text-figs.
There is appended a bibliography of 69 titles.

Wyman, J. 1843 A
Sternum of a male trumpeter swan (*Cygnus buccinator*).
Proc. Bost. Soc. Nat. Hist., I, 119.

—— 1843 B
Analogies between structure of the teeth of the Lepidostei and those of the labyrinthodonts.
Proc. Bost. Soc. Nat. Hist., I, 131-132.

—— 1848 A
On the *Zeuglodon*—Koch's *Hydrachos.*
Edinb. New Philos. Jour., XLIV, 152-154.
Reprinted from Boston Journal of September 30, 1847.

—— 1854 A
Istiophorus in Tertiary of Virginia.
Proc. Bost. Soc. Nat. Hist., IV, 260.

—— 1857 C
On Carboniferous reptiles.
Edinb. New Philos. Jour. (n.s.), V, 360-361.

Wyman, J.—Continued 1863 A
Description of a "white fish" or "white whale" (*Beluga borealis* Lesson).
Bost. Jour. Nat. Hist., VII, 603-612, pl. xiii.

—— 1867 B
On symmetry and homology in limbs.
Proc. Bost. Soc. Nat. Hist., XI, 246-278, 12 figs.
The bibliography is found in foot-notes.

—— 1875 A
Freshwater shell mounds of the St. John's River, Florida.
Mem. Peabody Acad. Sci., I, Mem. 4, v-viii+1-94, pls. i-ix.

Wyman, L. E. 1922 A
Notes on the Pleistocene fossils obtained from the La Brea asphalt pits.
Los Angeles Mus. Hist. Sci. Misc. Publ. No. 2, 5-35, 22 figs.
The bibliography presents 42 titles.

—— 1927 A
La Brea in retrospect.
Mus. Graphic, I, 82-87, 7 figs.

Yakowlew, N. 1903 A
Einige Bemerkungen über die triassischen Ichthyosauria.
Verh. Min. Ges. St. Petersb. (2), XL, 263-266.

Yates, Lorenzo G. 1886 A
Catalogue of fossils in collection of Lorenzo G. Yates, Santa Barbara, California, 1886.
Title quoted from Woodward, A. S., 1889 D, 149.

—— 1890 A
Notes on the geology of the islands forming the southerly line of the Santa Barbara Channel.
Amer. Geologist, V, 43-52.

—— 1903 A
Prehistoric fauna of California.
Bull. So. Calif. Acad. Sci., II, 17-22, 87-93, 97-101, 113-118, pls. ix-xii, text-figs. 1-3.
See Geol. Centralbl., IX, 707.

—— 1904 A
Prehistoric California.
Bull. So. Calif. Acad. Sci., III, 6-10, plate.

—— 1915 A
Letter to O. C. Marsh dated Feb. 14, 1876.
Trans. Conn. Acad. Arts, Sci., XIX, 67. Published by R. W. Shufeldt, 1915.

Yermoloff, A. 1907 A
The bisons of the Caucasus.
Rep. Smithson. Instn. for 1906 (1907), 345-353, pls. i, ii, text-figs. 1-4.
From La Nature, Paris, March 1907, 278-283, 2 plates, 4 text-figs.

Yoshiwara, S., and J. **Iwasaki** 1902 A
Notes on a new fossil mammal.
Jour. Coll. Sci. Tokyo, XVI, art. 6, 1-13, pls. i-iii, text-figs. 1-4.
Describe skull of *Desmostylus*, but without name, generic or specific.
Abstract in Jahresber. Anat. Entwickl. (N.F.), VIII, pt. 3, 118.

Young, Frank B., and Albert L. **Cooper** 1926 A
Evidences of diseases as shown in fossil and prehistoric remains: Paleopathology.
Trans. Amer. Med. Assoc., 77th ann. session.
Recorded from reprint, pages 1-11.
The bibliography reports 15 titles.

—— —— 1927 A
A study in Paleopathology.
Radiology, March 1927.
Recorded from reprint, 1-11, 3 pls.

Young, G. A. 1913 A
Moncton-Albert mines.
Can. Geol. Surv. Guide book, No. 1, pt. II, 351-367, with map.

Young, George W. 1915 A
The geological history of flying vertebrates.
Proc. Geol. Assoc., XXVI, 229-265, pls. xx-xxii, text-figs. 16-22.
Abstract in Rev. crit. Paléozool., XXV, 7.

Young, J. 1866 C
Note on the scales of *Rhizodus*.
Quart. Jour. Geol. Soc., XXII, 317.

—— 1866 D
On the affinities of *Chondrosteus*.
Phil. Mag. Jour. Sci. (4), XXXIII, 234.

Zaaijer, T. 1894 A
Die Persistenz der Synchondrosis condylosquamosa am Hinterhauptsbeine der Menschen und der Säugetiere.
Anat. Anz., IX, 337-348, 6 figs.

Zavattari, Edoardo 1908 A
Materiali per lo studio dell' osso ioide dei Sauri.
Atti Accad. Sci. Torino, XLIII, 1138-1144, pl. of 19 figs.
23 titles are recorded in the bibliography.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 82.

Zdansky, Otto 1924 A
Über die Temporalregion des Schildkrötenschädels.
Bull. Geol. Instn. Upsala, XIX, 89-114, 13 text-figs.

—— 1924 B
Jungtertiäre Carnivoren Chinas.
Palaeont. Sinica, II, fasc. 1, 1-155, pls. i-xxxiii, 24 text-figs.
The bibliography records 75 titles.
Abstract in Geol. Zentralbl., XXXII, 626.

—— 1925 A
Fossile Hirsche Chinas.
Palaeont. Sinica., ser. C, II, fasc. 3, 1-94, pls. i-xvi.
The bibliography includes 33 titles.

—— 1926 A
Ueber die systematische Stellung von *Xenotherium* Douglass.
Bull. Geol. Instn. Upsala, XX, 231-236, 3 figs.

—— 1926 B
Paracamelus gigas Schlosser.
Palaeont. Sinica, II, fasc. 4, 1-44, pls. i-iv, 23 text-figs.
In the bibliography are listed 41 titles.

—— 1927 A
Weitere Bemerkungen über fossile Cerviden aus China.
Palaeont. Sinica, X, fasc. 1, 1-21, pl. i, 6 text-figs.

Ziegler, Heinrich E. 1901 A
Ueber den derzeitigen Stand der Descendenzlehre in der Zoologie.
Verh. Ges. deutsch. Naturf., LXXIII, 1901, allgem. Sitzung., 228-248, 4 figs.

—— 1908 A
Die sog. Hornfäden der Selachier und die Flossenstrahlen der Knochenfische.
Zool. Anz., XXXIII, 721-727, 4 text-figs.

—— 1908 B
Die phylogenetische Entstehung des Kopfes der Wirbeltiere.
Jena. Zeitschr. Naturwiss., XLIII (N.F. XXXVI), 653-684, pl. xxiii, 11 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIV, pt. 3, 83-85.

—— 1923 A
Der jetzige Stand des Kopfproblems.
Anat. Anz., LVII, 62-72, 7 figs.
18 titles are noted in the bibliography.

—— 1924 A
Die Stammesgeschichte der Säugetiere.
Jahresh. Ver. Naturk. Württemb., LXXX, lx.

Zierler, F. E. 1905 A

Beiträge über die Differenzierung des Gebisses aus der Phylogenese der fossilen Suiden.

Biol. Centralbl., XXV, 508-519.
The bibliography comprises 17 titles.

Zietzschmann, Otto 1915 A

Beiträge zur Entwicklung von Hautorganen bei Säugetieren. I: Die Entwicklung der Hautschwielen (Kastanie und Sporn) an den Gliedmassen der Equiden.

Arch. mikr. Anat. Bonn., LXXXVI, 371-434, pls. xvi, xvii, 1 fig.

—— 1917 A

Betrachtungen zur vergleichenden Anatomie der Säugetierkralle.

Morphol. Jahrb., L, 433-450, pl. xxv.
There is a bibliography of 21 titles.

Zigno, A. de 1876 A

Sopra i resti di uno squalodonte scoperte nell' arenaria miocena del Bellunese.

Mem. Inst. Venezia, XX, 17-35, pl. 1.

Zimmer, A. 1905 A

Die Entwicklung und Ausbildung des Rehgehörns, die Grösse und das Körpergewicht der Rehe.

Zool. Jahrb. Syst., XXII, 1-58, pls. i-iv.

Zimmermann, A. 1912 A

Ueber das Episternum der Schafe.

Anat. Anz., XL, 646-651.

Zimmermann, S. 1913 A

Das Chondrocranium von *Anguis fragilis*.

Anat. Anz., XLIV, 594-606, 5 text-figs.
Abstract in Jahresber. Anat. Entwickl. (N.F.), XIX, pt. 3, 103.

Zittel, Karl A. 1877 A

Ueber *Squalodon bariensis* aus Niederbayern.

Palaeontogr, VI, 233-247, pl. XXXV.

—— 1877 B

Ueber *Squalodon bariensis* aus Niederbayern.

Ber. naturhist. Ver. Augsburg., XXIV, 19-46, 1 pl.

—— 1895 A

Palæontology and the biogenetic law.

Nat. Sci., VI, 305-312.

Zittel, Karl A. von—Continued 1897 A

Ontogenie, Phylogenie und Systematik.

C. R. Congr. internat. Geol. (Zurich), VI, 1894, 125-136.

—— 1901 A

History of geology and palæontology to the end of the nineteenth century.

8vo., i-xv+1-562 pages, with portraits. Translated from the original German of 1899 by Marie M. Ogilvie-Gordon. Reviewed in Nature, LXVI, 242-243.

——, and F. **Broili** 1911 A

Grundzüge der Paläontologie (Paläozoologie) von Karl A. von Zittel; neubearbeitet von F. Broili, E. Koken, M. Schlosser. II Abteilung: Vertebrata.

Zweitte vermehrte und verbesserte Auflage, mit 749 in den Text gedruckten Abbildungen, 143-308 pages with text-figs. 265-456.

This part of the volume deals with the Amphibia and the Reptilia.
Reviewed in Jour. Geol., XX, 91-93.

—— —— 1923 A

Grundzüge der Paläontologie (Paläozoologie) von Karl A. von Zittel neubearbeitet von F. Broili and M. Schlosser. II Abteilung: Vertebrata, Vierte Auflage.

162-383 pages, figs. 260-489. Amphibia and Reptilia.
Numerous citations of the literature in footnotes.
Abstract in Geol. Zentralbl., XXIX, 219.

——, and C. R. **Eastman**, etc. 1902 A

Text-book of palæontology by Karl A. von Zittel. Translated and edited by Charles R. Eastman, Ph.D., in collaboration with the following specialists: Fishes, A. S. Woodward; Amphibia, E. C. Case; Reptilia, J. B. Hatcher, H. F. Osborn, S. W. Williston; Aves, F. A. Lucas.

Vol. II, 114-255, 373 woodcuts, text-figs. 193-361.

This part of the volume is devoted to the amphibians and the reptiles.
Reviews in Rev. crit. Paléozool., VII, 71-75; Jour. Geol., XXII, 287; Geol. Mag., LXIII, 89.

Zittel, Karl A., and E. **Koken**—Continued 1911 A

Grundzüge der Paläontologie (Paläozoologie) von Karl A. von Zittel.

i-vii+1-142 pages, text-figs. 1-264.

This part of the volume deals with the Elasmobranchii and Pisces. See Zittel and Broili, 1911 A.

——, and F. A. **Lucas** 1902 A

Text-book of palæontology by Karl A. von Zittel. Translated and edited by Charles R. Eastman.

256-278, text-figs. 362-373.

This part of the volume edited by Dr. C. R. Eastman is devoted to the birds. See Zittel and Eastman, 1902 A.

——, and M. **Schlosser** 1911 A

Grundzüge der Paläontologie (Paläozoologie) von Karl A. von Zittel.

308-598, text-figs. 457-749.

This part of the volume deals with the Aves and Mammalia. See Zittel and Broili, 1911 A.

—— —— 1923 A

Grundzüge der Palaeontologie (Palaeozoologie) von Karl A. von Zittel. Neuarbeitet von F. Broili und M. Schlosser. II Abteilung: Vertebrata.

Vierte Auflage, 8vo., Munich and Berlin, i-v+1-162 pages, 209-689, figs. 1-259, 317-800.

On the pages noted the sharks, bony fishes, birds, and mammals are described. Abundant references to the literature are found in foot-notes.

In the present work the part on the amphibians and reptiles is recorded under Zittel and Broili, 1923 A.

Review in Nature, xvii, 548.

——, and A. S. **Woodward** 1902 A

Text-book of Palæontology by Karl A. von Zittel. Translated and edited by Charles R. Eastman.

1-114 pages, text-figs. 1-192.

This part of the volume is devoted to the fish-like vertebrates. See Zittel and Eastman, 1902 A.

Zograf, Nicholas 1887 A

On some of the affinities between the Ganoidei, Chondrostei and other fishes.

Nature, xxxvii, 70.

—— 1896 B

Sur l'odontographie der Ganoidei, Chondrostei.

C. R. Congr. internat. Zool., iii, Leyden, 1895, 320-335.

Zondek, M. 1895 A

Beiträge zur Entwicklungsgeschichte der Gehörknöchelchen.

Arch. mikr. Anat., Bonn, xliv, 499-509, 4 text-figs.

Zuckerkandl, E. 1908 A

Über den Jacobson'schen Knorpel und die Ossifikation des Pflugscharbeines.

Sitz.-Ber. Akad. Wiss. Wien, cxvii, Abt. iii, 493-547, 2 pls., 26 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xv, pt. 3, 93-99.

Zukowsky, Ludwig 1922 A

Beschreibung des Schädels von *Felis caudata macrothrix* Zukowsky.

Arch. Naturges., lxxxvii, Abt. A, Heft 10, 175-183, 2 figs.

References to the literature in foot-notes.

—— 1922 B

Beitrag zur Kenntnis von *Pusa hispida pygmæa.*

Arch. Naturges., lxxxvii, Abt. A. Heft 10, 183-199, 2 figs.

Citations of the literature in foot-notes.

Zurkirch, Joseph 1910 A

Die Kletterextremität des Coendu (*Coendu prehensilis* L.).

Arch. Naturges., lxxvi, 135-233, pls. iv-vii, 2 text-figs.

Abstract in Jahresber. Anat. Entwickl. (N.F.), xvi, pt. 3, 148.

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Adloff, P. 1904 B, 54 ("wirbeltiere").
Aichel, O. 1919 A.
Airey, L. B. 1919 A, 59, figs. 1, 2.
Alexander, G. 1904 A ("wirbeltiere").
Anthony, R. 1910 A, 777 ("vertébrés").
1912 A ("vertébrés").
Arldt, T. 1907 D, 688.
Ayers, H. 1906 A, 78.
Baraldi, G. 1877 A, 1-56 ("vertebrati").
Bardeleben, K. 1896 A, 95 ("wirbeltiere").
1905 A, 16 ("wirbeltiere").
1907 A, 34 ("wirbeltiere").
Baur, G. 1885 L.
Beer, G. R. 1926 A, 263-370.
Bender, O. 1910 A, 125 ("vertebraten").
Blainville, H. M. D. 1835 A, 238 (Osteozoa).
Böker, H. 1927 A, 2 ("wirbeltiere").
Bojanus, L. H. 1819 A, 1360 ("wirbelthiere").
Bolk, L. 1915 C, 191.
Bonaparte, C. L. 1838 B, 105.
Bordage, E. 1892 A, 333 ("vertébrés").
Braus, H. 1900 A, 45 ("wirbeltier").
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Cahall, W. C. 1890 A, 230 ("vertebrates").
Carter, J. T. 1905 A, 125 ("vertebrates").
Carus, V. 1875 A, 26.
Carus and Engelmann 1861 A, 951-966, 1668-1669, 1805, 1817 ("wirbelthiere").
Case, E. C. 1905 E, 179 ("vertebrates").
1909 C, 18 ("vertebrates").
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Chaine, J. 1918 A, 733 ("vertébrés").
Chamberlin, T. C. 1900 A, 401 ("vertebrates").
Chapman, H. C. 1894 A, 32 ("vertebrates").
Cleland, J. 1863 A, 116.
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Cope, E. D. 1885 BB, 60.
1885 EE, 606.
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Coues, E. 1870 A ("vertebrates").
Cuvier, G. F. 1805 A ("vertébrés").
1812 A, 23 ("vertébrés").
Dean, B. 1902 A, 767 ("vertebrates").
1902 B, 837 ("vertebrates").
1908 A, 202.
1909 B, 816.
Delsman, H. C. 1913 A, 64 ("vertebraten").
1924 A, 151 ("vertebrates").
Deninger, K. 1914 A, 181-214.
1915 A, 181-191.
Dixey, F. A. 1881 A, 64.
Döderlein, L. 1900 B, 48 ("wirbelthiere").
Dohrn, A. 1890 A ("wirbeltiere").
Dollo, L. 1889 E, 146 ("vertébrés").
1892 D, 116 ("vertébrés").
Drüner, L. 1905 A, 152.
Eastman, C. R. 1912 C, 657 ("vertebrates").
1913 B, 676 ("vertebrates").
1915 C, 658 ("vertebrates").
Ebner, V. 1889 A, 194 ("wirbelthiere").
Eisler, P. 1895 A ("vertebraten").
Eternod, A. 1895 A ("animaux").
Filatoff, D. 1906 A, 623 ("wirbeltiere").
Fleischmann, A. 1903 A, 560.
Foote, J. S. 1916 A.
Forster, A. 1905 A, 89-138.
Froriep, A. 1887 A, 815 ("wirbeltiere").
1905 A, 156 ("vertébrés").
Fry, E. 1850 A, 15.
Fuchs, H. 1905 B, 2.
1920 C, 92 ("wirbeltiere").
Gadow, H. 1910 A, 27 ("vertebrates").
Gaskell, W. H. 1890 A, 379 ("vertebrates").
1895 A, 19 ("vertebrates").
1898 A, 513.
1901 A, 224 ("vertebrates").
1905 A, 40 ("vertebrates").
1908 A, 537 ("vertebrates").
1910 A, 91.
Gaupp, E. 1898 B, 798 ("wirbeltiere").
1899 A, 990 ("wirbeltiere").
1905 C, 125 ("wirbeltiere").
1905 E, 159 ("wirbeltiere").
1906 A, 21 ("wirbeltiere").
1906 B, 573 ("wirbeltiere").
1911 C, 433 ("wirbeltiere").
1911 D, 609 ("wirbeltiere").
1912 A, 561 ("wirbeltiere").
1913 A ("wirbeltiere").
Geddes, A. C. 1912 A, 350 ("vertebrates").
Gegenbaur, C. 1870 C, 397 ("wirbeltiere").
Geoffroy-St. Hilaire, E. F. 1807 E, 342 ("vertébrés").
1822 B, 90 ("animaux vertébrés").
Gervais, P. 1853 B, 21-69.
Gill, T. 1873 E, 432, 435.
1898 B, 697 ("vertebrates").
Goette, A. 1895 A, 12 ("wirbelthiere").
Goodrich, E. S. 1910 A, 24 ("vertebrates").
Goodsir, J. 1857 A.
Gray, J. E. 1821 A, 297 (Vertebrosa).
Green, G. R. 1861 A, 218.
Gregory, W. K. 1913 E, 1 ("vertebrates").
1917 D, 623 ("vertebrates").
1927 C, 169 ("vertebrates").
Gregory and Adams 1915 A, 763 ("vertebrates").
Haeckel, E. 1868 A, 393, 433.
Haller, G. 1926 A, 446 ("wirbeltiere").
Hase, A. 1913 A.
Hatschek, B. 1889 A, 82 ("wirbeltiere").
1889 B, 113 ("wirbeltiere").
1893 A, 89 ("wirbeltiere").

Henshaw, H. W. 1912 A, 317 ("vertebrates").
Hertwig, O. 1892 A.
Hilgard, T. C. 1857 A, 98.
1858 A, 81.
1860 A, 678.
Hill, C. 1899 A, 353 ("vertebrates").
1900 A, 392 ("vertebrates").
Hilzheimer, M. 1913 A, 465 ("wirbeltiere").
Hoernes, R. 1886 A, 524.
Hubrecht, A. A. W. 1908 A, 149.
Huene, F. 1908 H, 156-175.
1910 F, 147-163.
1911 G, 145-161.
Humphrey, G. M. 1876 A, 659 ("vertebrates").
Huxley, T. H. 1853 A, 149, 158.
1856 A, 45.
1859 D, 381.
1862 A, li.
1863 E, 417, 471.
1863 F, 1, 57, 107, 189, 371, 425, 475, 529, 579, 607, 633, 663.
1869 G, 436.
1876 D, 224.
1876 F, 163.
1880 E, 457.
Jacobshagen, E. 1920 A, 85 ("wirbeltiere").
Jaekel, O. 1901 B, 52 ("wirbeltiere").
1903 E, 84 ("wirbeltiere").
1906 A, 7 ("wirbeltiere").
1909 A, 200.
1911 A, 12.
1912 A, 609 ("wirbeltiere").
1913 A, 77 ("wirbeltiere").
1918 A, 229 ("wirbeltiere").
1921 A, 233.
1925 A, 165 ("wirbeltiere").
1927 A, 250-272; 278-279.
1927 B, 342 ("wirbeltiere").
Julien, A. 1894 A, 173 ("vertébrés").
Kerr, J. G. 1900 A, 227 ("vertebrates").
1901 A, 693 ("vertebrates").
1910 A, 203 ("vertebrates").
1923 A, 113.
Kiaer, J. 1928 A ("vertebrates").
Kingsbury and Adelmann 1924 A, 239-341 ("vertebrates").
Kingsley, J. S. 1894 A, 635 ("vertebrates").
1896 A, 136 ("vertebrates").
1900 A, 204 ("vertebrates").
1912 A, 185 ("vertebrates").
Köstlin, O. 1844 A ("wirbeltiere").
Kupffer, C. 1893 A, 513.
Lavocat, A. 1883 A, 1316 ("vertébrés").
1884 A, 1125 ("vertébrés").
1885 A, 23 ("vertébrés").
1889 A, 39 ("vertébrés").
Le Damany, P. 1902 A, 333 ("vertébrés").
1903 A, 273 ("vertébrés").
1903 B, 275 ("vertébrés")
1903 G ("vertébrés").
1906 B, 155 ("vertébrés").
Leydig, F. 1887 A, 534 ("wirbeltiere").
Lubosch, W. E. 1908 A, 192 ("wirbeltiere").
Lull, R. S. 1906 B, 537 ("vertebrates").
1917 B, 460 ("vertebrates").
MacBride, E. W. 1910 A, 15.
Macdonald, W. 1863 A, 49 (Vertebralia, Osteozoa).
McMurrich, J. P. 1912 A, 167.
Matthew, W. D. 1916 C.
1923 B, 107.
Meckel, J. F. 1825 A ("wirbeltiere").
Meek, A. 1907 A, 408 ("vertebrates").
Middleton, J. 1844 A, 285.
Mivart, St. G. 1871 B, 369, 375.
Mivart and Clarke 1879 A, 513.
Mollier, S. 1895 B, 1 ("wirbeltiere").
Müller, F. 1911 A, 335 ("wirbeltiere").
Nauck, E. T. 1926 B, 22.
Noordenbos, W. 1905 B, 367 ("säugetiere").
Nopcsa, F. 1923 B, 350.
1926 A, 634.
Nowikoff, M. 1910 A, 184.
Nunn, E. 1882 A, 156 ("vertebrates").
Osborn, H. F. 1905 N, 235 ("vertebrates").
1916 E, 508 ("vertebrates").
1917 B, 322.
Osburn, R. C. 1907 A, 415.
1907 B, 171 ("vertebrates").
Oswald, F. 1909 A, 123 ("vertebrates").
1911 A, 406.
Owen, R. 1846 E.
1848 B.
1868 A, 914 ("vertebrates").
Parker, W. K. 1887 B, 52.
Parker and Haswell 1897 A, 37.
Patten, W. 1902 B, 180 ("vertebrates").
1925 A, x.
1926 A, 237 ("vertebrates").
Perrier, E. 1898 A, 1479 ("vertébrés").
Peters, W. 1868 B, 388.
Raymond, P. E. 1925 A, 435, 436.
Röse, C. 1892 G, 148 ("vertebraten").
Roule, L. 1892 A, 588 ("vertébrés").
Ryder, J. 1887 A, 344 ("vertebrates").
Sabatier, A. 1902 A, 99 ("vertébrés").
Schauinsland, H. 1906 A, 339 ("vertebraten").
Schenk, F. 1896 A, 213 ("wirbeltiere").
Schlosser, M. 1898 D, 119 ("wirbeltiere").
Seeley, H. G. 1866 B, 345 ("vertebrates").
1872 A, 265.
1872 B, 21.
Sewertzoff, A. 1896 A, 189.
1897 A, 409 ("wirbeltiere").
1904 A, 472.
1926 C, 42 ("wirbeltiere").
Starling, E. H. 1910 A, 20 ("vertebrates").
Steinmann, G. 1907 A, 389-542.
Stephan, P. 1900 A, 283.
Stieda, L. 1897 A ("wirbelthiere").
Stromer, E. 1905 H, 214 ("wirbeltiere").
1912 A.
1920 A, 9 ("wirbeltiere").
Terra, P. 1911 A.
Traquair, R. H. 1900 C, 502.
Veit, O. 1916 A, 368 ("wirbeltiere").
1924 A, 374 ("wirbeltiere").
Vialleton, L. 1917 A, 190 ("vertébrés").
Wallace, A. R. 1876 A, i, 503.
Wagner, R. 1843 A, 9.
Weidenreich, F. 1926 A, 45 ("wirbeltiere").
Wiedersheim, R. 1886 A.
Wilder, B. 1865 A, 56 ("vertebrates").

Wilder, B. 1872 B ("vertebrates").
Williston, S. W. 1909 A, 389 ("vertebrates").
Woodward, A. S. 1910 D, 31 ("vertebrates").
Woodward, H. 1904 B ("vertebrates").
Wyman, J. 1867 B, 248 ("vertebrates").
Ziegler, H. E. 1908 B, 653 ("wirbeltiere").
Ziegler, H. E. 1923 A, 62, figs. 1-7 ("wirbeltiere").
Zittel, K. A. 1901 A, 409.
Zittel and Koken 1911 A.
Zittel and Schlosser 1923 A, 1-705, figs. 1-800.
Zittel and Woodward 1902 A.
Zondek, M. 1895 A, 499 ("wirbeltiere").

Class PLAGIOSTOMI Meckel.

Meckel, J. F. 1809 A, tab. iv.

Unless otherwise indicated, the authors, as quoted, use for this class the name Elasmobranchii. Meckel, as cited, includes under Plagiostomi the genera *Raja, Squalus* and *Chimæra*. His name therefore antedates Elasmobranchii of Bonaparte.

Hay, O. P. 1902 A, 262.

Abel, O. 1912 F, 440.
1919 A, 104.
1920 A, 325.
1921 A, 144, 248 ("haifische").

Adloff, P. 1904 B, 54 ("selachier").
1907 A, 532 ("fische").
1915 A, 436 ("selachier").

Agar, W. E. 1907 A, 625 ("elasmobranchs").

Agassiz, L. 1832 A, 141 (Chondropterygii).
1835 I, 99 ("placoidians").
1840 A, 58 ("poissons").
1840 B, 62 ("poissons").
1844 C, 251 ("poissons").
1844 D, 132 ("fishes"); 139 ("placoides").
1844 E, 332 ("placoids").
1856 B, 38 ("plagiostomes").
1858 A, 8 ("selachians").
1859 A, 108 ("fishes").
1874 A, 129 ("selachians").

Allis, E. P. 1903 A, 662.
1905 A, 470.
1915 A.
1917 A, 140.
1922 C, 1.
1923 B, 156.
1925 A, 75.
1926 B, 334.

Anderson, R. J. 1914 A, 533 ("selachians").
Anthony, R. 1912 A ("poissons").
Arldt, T. 1923 A, 483 ("elasmobranchier").
Ayers, H. 1906 A, 77 (Selachia).
Backman, G. 1915 A, 14.
Baraldi, G. 1877 A, 7, 44 ("sélaciens").

Bardeleben, K. 1896 A, 114 ("selachier").
1901 A, 28 ("selachier").
1903 A, 20 ("selachier").
1906 A, 139 ("selachier").
1907 B, 154 ("fische").

Barkas, W. J. 1874 D, 542 ("fishes").
Barrell, J. 1915 B, 392 ("fishes").

Baur, G. 1885 L ("vertebrates").
1893 D, 117 ("selachier").

Beer, R. G. 1922 A, 457 ("elasmobranchs").
Belling, D. E. 1912 A, 53 (Selachii).
Bessels, E. 1869 A, 152 ("selachier").
Bluntschli, H. 1912 B, 379 ("selachier").
Boas, J. E. V. 1914 B, 538 ("selachier").
Bolk, L. 1922 B, 68.

Bonaparte, C. L. 1831 A, 98 (Chismopnei. Includes Acipenseridæ, Chimeridæ, Squalidæ, and Rajidæ).
1838 C, 214.
1840 A, 44.

Born, G. 1827 A, 182 ("fische").

Brandt, J. F. 1865 A, 2 ("selachier"); 21 (Pisces, in part).

Braus, H. 1901 A, 177 ("selachier").
1901 B, 174, 194 ("selachier").
1906 A ("selachier").
1906 B, 552 ("chondropterygier").

Bridge, T. W. 1878 A.
1896 A, 533.
1904 A, 431, 739.

Bryant, W. L. 1926 B, 257.
Brohmer, P. 1908 A, 25 (On Spinax).
1909 A, 646 ("selachier").
Bronn, H. G. 1849 A, 636, 781, seq.
Burckhardt, R. 1903 A, 78 ("fische").
1906 A, 156 ("fische").
Cahall, W. C. 1890 A, 232 ("fishes").
Carter, J. T. 1905 A, 129.
Carus, V. 1875 A, 597 (Selachii).
Carus and Engelmann 1861 A, 968-997, 1669-1676, 1788 (Pisces).
Claypole, E. W. 1900 A, 247 ("elasmobranchs").
Cleland, J. 1863 B, 308 ("fishes").
1870 A, 120 ("fishes").
Collinge, W. E. 1894 A, 526.
1895 C, 888.
Cope, E. D. 1885 BB, 64.
1891 N, 10.
Coulon, L. 1903 A, 99 ("poissons").
Cunningham, J. T. 1897 A, 492 ("elasmobranchs").
1912 A, 231-440 ("fishes").

Cuvier, G. 1801 A, 25 ("poissons").
1803 A, 166 ("poissons").
1805 A ("chondroptérygiens").
1814 A, 73 ("poissons").
1815 A, 121 ("chondroptérygiens").

Dana, J. D. 1863 A, 3 ("fishes").
1863 C, 343 ("fishes").
Daniel, J. F. 1922 A.
Davidoff, M. 1879 A, 450 ("fische").

Dean, B. 1895 B, 424 ("sharks").
1900 A, 23, 27.
1903 A, 285 ("elasmobranchs").
1904 C, 437 ("fishes").
1906 B, 155.
1916 A ("fishes").

Dean and Eastman 1916 A.
1917 A.
Deinse, A. B. 1916 A, 417 ("selachier").
Delsman, H. C. 1913 A, 659 ("selachier").
1924 A, 155 ("selachians").

Deninger, K. 1914 A, 183-214 ("fische").
1915 A, 181-183 ("fische").
Dependorf, T. 1907 A, 546 ("fische").
Derjugin, K. 1910 B, 207 ("selachier").
Diener, C. 1909 A, 32 ("fische").
Dietz, P. A. 1917 A, 79.
Dohrn, A. 1884 A ("selachier").
1890 A ("selachier").
Dollo, L. 1889 E, 146 ("poissons").
1889 F, 333 ("élasmobranchs").
1893 D, 5 ("poissons").
1896 A, 110 ("élasmobranches").
1903 D, 701 ("élasmobranches").
1904 C, 47 ("chondroptérygiens").
1906 B, 137 ("chondroptérygiens").
Dombrowsky, B. A. 1918 A, 204.
Drüner, L. 1902 A, 438 ("selachier").
1906 A, 6 ("selachier").
Dugès, A. 1905 A, 107 ("poissons").
Eastman, C. R. 1898 E, 177 ("fishes").
1901 C 329 ("elasmobranchs").
1905 A, 46 ("elasmobranchs").
1907 B, 23.
1908 A, 59, 69, 95 ("elasmobranchs").
1911 A, 20.
1913 B, 677 ("fishes").
1916 A, 655 (Pisces).
1917 A, 254.
Eastman and Barbour 1902 A, 267 ("elasmobranchs").
Ebner, V. 1896 A, 123 ("fische").
Eichwald, E. 1832 A, 876 ("selachier").
Eisler, P. 1895 A, 17 ("fische").
Elliot, A. I. M. 1907 A, 648 ("selachians").
Emery, C. 1895 A, 223 ("sélaciens").
Erdl, M. 1843 A ("fische").
Fahrenholz, C. 1915 A, 389 ("selachier").
Filatoff, D. 1907 A, 338.
Fitzinger, L. J. 1873 A, 53.
Forster, A. 1905 A, 89-138.
Fowler, H. W. 1911 A, 22.
Fraas, E. 1905 B, 354 ("fische").
Froriep, A. 1902 A, 34 ("selachier").
1905 A, 156 ("sélaciens").
1905 B, 111 ("selachier").
Fuchs, H. 1907 C, 24 ("fische").
1909 B, 164 ("selachier").
1909 D, 185 ("selachier").
Fürbringer, K. 1903 A, 360 ("selachier").
Fürbringer, M. 1902 A.
1904 A ("selachier").
Gadow, H. 1910 A, 27 ("elasmobranchs").
Garman, S. 1911 A, 81 (Chondropterygii).
1913 A, 2, 9 (Chondropterygii).
Gaskell, W. H. 1905 A, 41 ("fishes").
1908 A, 23, 343, 423 ("elasmobranchs").
Gaupp, E. 1897 A, 545 ("elasmobranchier").
1898 B ("selachier").
1901 B, 931 ("selachier").
1905 D, 867 ("selachier").
1906 B ("selachier").
1910 C, 338 ("selachier").
1911 E, 338 ("selachier").
1913 A, 23 ("selachier").
Geddes, A. C. 1912 A, 353 ("elasmobranchs").
Gegenbaur, C. 1867 A, 56 ("selachier").
1870 C, 398 ("fische").
Gegenbaur, C. 1871 B ("selachier").
Geoffroy St. Hilaire, E. F. 1807 C, 87 ("poissons").
Giebel, C. G. 1855 A, 114 (Selachii).
Gill, T. 1873 E, 435 ("elasmobranchiates").
1885 A, lxiii ("selachians").
1898 A, 686 ("selachians").
1905 A, 655, 657.
1909 A, 193 ("elasmobranchiates," Chondrophora).
Goetsch, W. 1920 A, 5, 518 ("plagiostomen," "selachier").
Goette, A. 1901 A, 533 ("fische").
Goodrich, E. S. 1904 A, 468, 492.
1906 A ("elasmobranchs").
1908 A, 752 ("elasmobranchs").
1909 A, 118 (Chondrichthyes); 125 (Elasmobranchii).
1924 A, 935 (Chondrichthyes).
Greene, J. R. 1861 A, 227.
Gregory, W. K. 1907 D, 445.
1911 A, 509 ("fishes").
1911 B, 892 ("sharks").
1915 D, 320, 343.
1922 A, 546 ("sharks").
Haeckel, E. 1868 A, 441, 443 (Selachii).
1873 A, 516, 585 (Selachii).
1893 A, xvi ("selachier").
Harrison, R. G. 1893 A, 248 ("selachier").
1895 A, 566 ("selachier").
Hase, A. 1907 A, 655 ("selachier").
1913 A ("fische").
Hasse, C. 1873 B, 629 ("plagiostomen").
1892 B, 519 ("elasmobranchier").
1893 B, 537 ("elasmobranchier").
Hasse and Schwarck 1870 A, 47 ("plagiostomen").
Hatschek, B. 1889 A, 82 ("fische").
1889 B, 114 ("fische").
Hawkes, O. A. M. 1905 A, 82 ("elasmobranchs").
Hay, O. P. 1897 A, 131 ("sharks").
1901 B, 63.
1917 H, 383 ("fishes").
Heckel, J. 1851 A, 219 ("selachier").
Heilprin, A. 1887 A, 299.
Henshaw, H. W. 1912 A, 318 ("fishes").
Hertwig, O. 1892 A.
Hoernes, R. 1886 A, 539 (Chondropterygii).
Hoeven, J. 1822 A (Pisces, in part).
Houssay, F. 1909 A, 617 ("poissons").
1909 B, 943 ("poissons").
1909 C, 1076 ("poissons").
Howes, G. B. 1902 A, 525 ("elasmobranchs").
Hubbs, C. L. 1926 A, 61 ("elasmobranchs").
Huber, O. 1901 A, 592 ("selachier").
Hubrecht, A. A. W. 1908 A, 152; 156 (Chondrophora).
Huene, F. 1907 A, 151-152 ("fische").
1910 F, 147-163 ("fische").
1911 G, 146-151 ("fische").
1926 A, 260.
Hussakof, L. 1910 A, 925 ("selachians").
Huxley, T. H. 1853 A, 150 ("skate").
1859 D, 417.
1859 H, 33.
1861 D, 448.

Huxley, T. H. 1869 G, 452.
1876 E, 103.
1883 B, 571.
Ihering, H. 1878 A, 72 ("fische").
Imms, A. D. 1905 A, 41 (("elasmobranchs").
Jacobshagen, E. 1923 A, 174 ("selachier").
Jaekel, O. 1902 E, 1115 ("plagiostomen").
1903 F, 28 (Pisces, in part); 36, 46 ("selachier").
1906 A, 8 ("selachier").
1906 C, 155 ("selachier").
1909 D, 701 ("fische").
1913 A, 77 ("fische").
1913 B, 194 ("selachier").
1927 A, 253 ("selachier").
Jaquet, M. 1900 A, 60 ("sélaciens").
Johnson, A. 1883 A, 402 ("elasmobranchs").
Jordan, D. S. 1898 A, 173 ("fishes").
1901 A ("fishes").
1902 A, 240 ("fishes").
1905 A, i, 506; ii, 568.
1907 B, 180, 758.
1923 A, 90.
Jordan and Gilbert 1882 A, 12.
Kellicott, W. E. 1905 A, 137.
Kerr, J. G. 1901 A, 694 ("selachians").
1910 A, 203 ("elasmobranchs").
Keyes, C. A. 1922 A, pl. iii.
1924 A, 233 ("fishes").
Kiaer, J. 1924 A, 91, 100, 101, 111.
Kindred, J. E. 1919 A, 27 ("elasmobranchs").
Kingsley, J. S. 1885 A, 68.
1896 A, 147 ("elasmobranchs").
1900 A, 204 ("elasmobranchs").
1901 A, 197 ("sharks").
1912 B ("elasmobranchs").
1925 A, 10, 29, 81, 232 ("elasmobranchs").
Klaatsch, H. 1893 B ("fische").
1893 C, 143 ("fische").
Kner, R. 1860 B, 815 (Plagiostomi).
Koken, E. 1893 B, 640 ("fische").
Kolmer, W. 1923 A, 529 ("selachier").
Krivetski, A. 1917 A, 16 ("sélaciens").
Lavocat, A. 1884 A, 1126 ("poissons").
1896 B, 194 ("poissons").
1897 A, 138 ("poissons").
Le Damany, P. 1902 A, 333 ("poissons").
Leigh-Sharpe, W. H. 1926 A, 307 ("elasmobranchs").
Leunis and Ludwig 1883 A, 779 (Chondropterygii).
Locy, W. A. 1894 A, 171 ("elasmobranchs").
Lönnberg, E. 1901 A.
1902 A.
Lubosch, W. 1909 A, 1 ("selachier").
Lütken, C. 1868 C (Selachii).
1871 A, 296 ("chondrostéens desmobranches").
Lydekker, R. 1907 C, 464.
M'Donnell, R. 1864 A, 161 ("fishes").
Mantell, G. A. 1844 A, 587, 612 ("sharks, rays").
Meckel, J. F. 1825 A ("plagiostomen").
Meek, A. 1916 A, 34.
Menmuir, W. H. 1902 A, 273.
Miall, L. C. 1872 A, 32.
Mivart, St. G. 1871 B, 378 ("elasmobranchs").
Montgomery, T. H. 1901 A, 21733 ("fishes").
Moodie, R. L. 1915 I, 138 ("selachians").
Mummery, J. H. 1917 A, 264 ("elasmobranchi").
Nauck, E. T. 1926 B, 29 ("chondropterygier").
Ortmann, A. E. 1901 A, 694 ("fishes").
Osborn, H. F. 1916 E, 601 ("sharks, rays").
1917 B, 168, 292.
Osburn, R. C. 1907 B, 174 (Selachii).
Oswald, F. 1911 A, 409 ("elasmobranchs").
Owen, R. 1845 B, 23 ("plagiostomes").
Paramore, R. H. 1910 A, 1393 ("fishes").
Parker, W. K. 1888 C, 399 ("elasmobranchs").
Parker and Haswell 1897 A, 134.
Paterson, A. M. 1902 A, 777 ("elasmobranchs").
Patten, W. 1912 A, 384.
Philippi and Frech 1903 A, 10 ("selachier").
Poche, F. 1911 A, 49 ("selachier").
Pompeckj, J. F. 1913 A, 1120.
1914 A, xcii ("fische").
Priem, F. 1908 B ("elasmobranches").
Rabinerson, A. 1925 A, 434 ("knorpelfische").
Rabl, C. 1901 A, 475 ("selachier").
Radcliffe, L. 1916 A, 243 (Chondropterygia).
1917 A, 26 ("sharks").
Rauther, M. 1913 A, 1097.
Regan, C. T. 1904 A, 329 (Chondropterygii).
1906 A, 722 (Selachii).
1908 D, 347 ("selachians").
1909 B, 75 (Selachii).
1923 B, 459 ("selachians").
Reis, O. M. 1894 A, 50 ("elasmobranchier").
1894 B, 87 ("fische").
Reynolds, S. H. 1897 A, 62, 104, 117, 124, 127, 539.
Ridewood, W. G. 1895 B ("elasmobranchs").
1896 A, 380 ("fishes").
1897 B, 499 ("elasmobranchs").
Rohon, J. V. 1902 A, 25 ("selachier").
Romer, A. S. 1928 A, 432 ("fish").
Rosén, N. 1916 A, 7 ("selachier").
Roth, W. 1911 A ("selachier").
Ryder, J. 1885 E, 91 ("elasmobranchs").
1886 A, 71 ("elasmobranchs").
1887 A, 345.
Sabatier, A. 1903 B, 1216 ("chondroptérygiens").
1904 A, 251 ("chondroptérygiens").
Salbey, R. 1868 A, 734 ("placoiden").
Schauinsland, H. 1906 A ("elasmobranchier").
Schlosser, M. 1917 A, 132, 133, 137, 139 ("elasmobranchier").
Schmalhausen, J. J. 1912 A, 510, 550 ("selachier").
1913 C.
1916 C, 211.
1923 A, 537 ("selachier").
Schöne, G. 1902 A, 1 ("selachier").
Schuchert, C. 1915 A, 682.
Schuchert and Barrell 1914 A, 25 ("fishes").
Sedgwick, A. 1894 A, 43.
Seeley, H. G. 1872 B, 26 ("fish").
Sewertzoff, A. N. 1896 A, 206 ("selachier").
1918 A, 206.
1923 A, 389 ("elasmobranchier").
1923 B ("elasmobranchs").
1926 A, 531.
1926 D, 76 ("elasmobranchier").

Sewertzoff and Disler 1924 A, 345 ("elasmobranchier").
Shann, E. W. 1919 A, 532.
Simpson, G. G. 1926 J, 173 ("elasmobranchs").
Sollas and Sollas 1903 A, 288 ("elasmobranchs").
Sonies, F. 1907 A, 404 ("selachier").
Spencer, W. B. 1886 A, 231 ("elasmobranchs").
Springer, F. 1924 A, 234 ("selachian fishes").
Stannius, H. 1854 A.
Steinmann, G. 1907 A, 399.
1908 A, 303 ("fische").
Stensiö, E. A. 1925 A, 64.
1925 B, 160, 179.
Strecker, C. 1887 A, 301 ("fische").
Stromer, E. 1905 C, 181 ("elasmobranchier").
1905 F, 477.
1912 A, 17, 47.
1920 A, 12.
1925 A, 16 ("elasmobranchier").
Suschkin, P. 1910 A, 247 ("elasmobranchier").
Swinnerton, H. H. 1911 A, 447 ("fishes").
Terra, P. 1911 A, 135, 198.
Tomes, C. S. 1875 C, 362.
1876 A, 257.
1898 B, 443 ("plagiostomes").
1900 A, 35 ("plagiostomes").
Traquair, R. H. 1899 C, 602 ("elasmobranchs").
1900 C, 505.
Van Wijhe, J. W. 1905 B, 319 ("selachier").
Veit, O. 1924 A, 383 ("elasmobranchier").
Versluys, J. 1922 B, 95 (Selachii).
Virchow, H. 1895 A, 105 ("selachier").
Watson, D. M. S. 1925 A, 815, 822, 825 ("elasmobranchs").
Weber, E. H. 1821 A, 1060 (Chondropterygii).
Weidenreich, F. 1922 A, 45 ("elasmobranchier").
Whitehouse, R. H. 1910 C, 135 ("elasmobranchs").
1914 A, 522 ("fishes").
1918 A, 136 ("elasmobranchs").
Wiedersheim, R. 1892 A, 43 ("fische").
Wilbrand, J. B. 1824 A, 982 ("fische").
Wilder, B. G. 1865 A, 56.
Wintrebert, P. 1910 B, 78 ("sélaciens").
Woodward, A. S. 1898 E, 329 ("fishes").
1910 B, 464 ("fishes").
1915 B, lxiv.
1917 D, lxv ("fishes").
1921 B, 29 ("sharks, rays, chimæras").
1922 C, 62.
1924 B, 338.
Woodward, H. 1878 A, 22 (Plagiostomi).
1904 B, 140.
Wright, E. P. 1878 A, 286 ("fishes").
1878 B, 149 ("fishes").
Wright, W. 1909 A, 670.
Wyman, J. 1867 B, 264 ("fishes").
Ziegler, H. E. 1901 A, 231 ("selachier").
1908 B, 655 ("selachier").
Zittel, K. A. 1901 A, 409 ("fishes").
Zittel and Koken 1911 A, 39.
Zittel and Schlosser 1923 A, 45.
Zittel and Woodward 1902 A, 17 (Selachii).

Subclass Trematopnei Bonaparte.

Bonaparte, C. L. 1831 A, 99, 121.
Unless otherwise indicated, the authors, as quoted, apply to this subclass the name Plagiostomi. It is often difficult to determine in just what sense writers employ their terms, systematic and vernacular. Bonaparte here included Cyclostomi, but later removed them.
Hay, O. P. 1902 A, 263 (Plagiostomata).
Agassiz, A. 1877 A, 123 ("plagiostomes").
Allis, E. P. 1905 A, 495.
1914 A, 353 ("selachians").
1918 B, 263.
Anthony, R. 1912 A ("sélaciens").
Arldt, T. 1907 D, 674.
Bender, O. 1907 A, 38 ("selachier").
1910 A, 122 ("selachier").
Bolk, L. 1914 A, 118 ("plagiostomen").
Bonaparte, C. L. 1833 B, 1203.
1840 A, 44.
Braus, H. 1899 A, 501 ("selachier").
Bridge, T. W. 1904 A, 148, 751.
Brohmer, H. G. 1849 A, 830, seq.
Bronn, H. G. 1849 A, 830, seq.
Cartier, O. 1875 A, 65 ("plagiostomen").
Cope, E. D. 1871 T, 449 (Selachii).
Cunningham, J. T. 1912 A, 246.
Davidoff, M. 1879 A ("plagiostomen").
Day, E. C. H. 1865 A, 565.
Dames, W. 1898 C, 331 ("sharks").
Dean, B. 1903 A, 285 (Selacha).
Derjugin, K. 1910 A, 587 (Selachii).
Dohrn, A. 1884 A, 139 ("plagiostomen").
Dollo, L. 1904 C, 47 ("elasmobranchs").
Dormitzer, M. 1852 A, 61 ("plagiostomen").
Duméril, A. 1856 A, 120 ("plagiostomen").
Fahrenholz, C. 1915 A, 390 ("plagiostomen").
Fitzinger, L. J. 1873 A, 54 (Plagiostomata).
Huxley, T. H. 1876 E, 121.
1883 B, 571.
Fuchs, H. 1907 C, 27 ("plagiostomen").
Fürbringer, K. 1904 B, 458, 479 ("selachier").
Garman, S. 1904 A, 246 ("plagiostomes").
1913 A, 9, 10 (Plagiostomia).
Gaupp, E. 1906 A, 27 ("selachier").
1910 C.
1911 A, 419 ("selachier").
Gegenbaur, C. 1866 A, 123 ("selachier").
1867 B, 380 ("selachier").
1870 C, 399 ("selachier").
1879 A, 522 ("selachier").
Gill, T. 1905 A, 657.
Goette, A. 1878 A, 12 ("plagiostomen").
Goodrich, E. S. 1910 A, 24 ("selachians").
Goodsir, J. 1857 B ("plagiostomes").
Greene, J. R. 1861 A, 227.
Haeckel, E. 1875 A, 516.
1893 A, xviii.
Hamburger, R. 1904 A, 73 ("selachier").
Hilzheimer, M. 1913 A, 471.
Hoernes, R. 1886 A, 540.
Huxley, T. H. 1859 D, 418 ("plagiostomes").
1876 E, 121.
1883 B, 571.
Jaekel, O. 1903 D, 59 ("selachier").

Jaekel, O. 1912 A, 621 ("selachier").
Jordan, D. S. 1905 A, i, 508; ii, 591 (Selachii).
1907 B, 182, 758 (Selachii).
1923 A, 90 (Selachii).
Killian, G. 1891 A, 85 ("selachier").
Kingsley, J. S. 1885 A, 72.
Klaatsch, H. 1890 A, 119 ("plagiostomen").
Lönnberg, E. 1901 A.
1902 A.
Lubosch, W. E. 1908 A, 200 ("selachier").
Meek, A. 1907 A, 411 (Selachii).
Miall, L. C. 1872 A, 41.
Müller, J. 1845 A, 137.
Nunn, E. 1882 A, 160 ("plagiostomes").
Nusbaum, J. 1907 A, 309 ("selachier").
Owen, R. 1868 A, 901.
Parker, T. J. 1886 A, 635.
Parker, W. K. 1879 C, 331 ("selachians").
Pompeckj, J. F. 1913 A, 1123.
Rabl, C. 1892 A, 10 ("selachier").
Radcliffe, L. 1911 A, 243 (Plagiostomia).
Rafinesque, C. S. 1815 A, 93 (Plagiostomia).
Rauther, M. 1913 A, 1055, 1093.
Regan, C. T. 1906 A, 722, 726 (Trematopnea).
1912 A, 836 (Trematopnea).
Reis, O. M. 1893 A, 501.
1894 A, 62 ("plagiostomen").
Roth, W. 1911 A, 518 ("plagiostomen").
Sabatier, A. 1904 A, 249 ("sélaciens").
Schmalhausen, J. J. 1913 A, 60 (Plagiostomata).
Shann, E. W. 1919 A, 532.
Solger, B. 1880 B, 458, pl. xxxix ("selachier").
Spengel, J. W. 1905 A, 332 ("elasmobranchier").
Steinhard, O. 1903 A, 1 ("plagiostomen").
Stromer, E. 1912 A, 18, 47.
Versluys, J. 1922 B, 95 (Selachii).
Wallace, A. R. 1876 A, ii, 460 (Plagiostomata).
Wiedersheim, R. 1892 A, 45 ("selachier").
Ziegler, H. E. 1908 A, 721 (selachier").

Superorder TAPINOSELACHII nom. nov.

To include Pleuropterygia, Ichthyotomi and Acanthodei.

Order PLEUROPTERYGIA Dean.

Unless otherwise indicated, the authors, as quoted, use the form Pleuropterygii.
Hay, O. P. 1902 A, 272 (Pleuropterygia).
Abel, O. 1919 A, 110 (Pleuropterygia).
1920 A, 328 ("pleuropterygier").
Arldt, T. 1923 A, 483 ("pleuropterygier").
Backman, G. 1915 A, 24.
Bridge, T. W. 1904 A, 436.
Dean, B. 1900 A, 22.
1902 C, 702.
1906 B, 155 ("pleuropterygians").
1907 B, 220.
1909 C, 241.
Eastman, C. R. 1900 G, 287.
1907 B, 23, 54 (Pleuropterygia).
1908 A, 69, 97.
Gill, T. 1905 A, 657.
Goodrich, E. S. 1908 A, 753.
Gregory, W. K. 1907 D, 445 (Pleuropterygia).
Hussakof and Bryant 1919 A, 127.
Jordan, D. S. 1905 A, i, 514; ii, 586.
1907 B, 758.
1923 A, 91.
Kiaer, J. 1924 A, 100, 104 (Cladoselachii).
Osburn, R. C. 1907 A, 420, 425 (Pleuropterygidæ).
1907 B, 173 (Pleuropterygidæ).
Parker and Haswell 1897 A, 154 (Cladoselachea).
Pompeckj, J. F. 1913 A, 1122 (Cladoselachii).
Regan, C. T. 1906 A, 722, 731.
1912 A, 836 (Pleuropterygia).
Reynolds, S. H. 1897 A, 31, 63.
Sewertzoff, A. N. 1926 B, 577, 579.
Stromer, E. 1920 A, 12, 15 (Cladoselachii).
Woodward, A. S. 1921 B, 29.
1922 C, 64.
Zittel and Woodward 1902 A, 19.

CLADOSELACHIDÆ Dean.

Hay, O. P. 1902 A, 272.
Arldt, T. 1923 A, 483 ("cladoselachier").
Backman, G. 1913 A, 54.
Braus, H. 1906 A, 199 ("cladoselachiden").
Bridge, T. W. 1904 A, 438.
Dean, B. 1895 B, 424 ("cladoselachids").
1902 A, 768, 770 ("cladoselachids").
1907 B, 220 ("cladoselachians," Cladoselachia).
1909 C, 212, 241 (Cladoselachia, Cladoselachidæ).
1912 A, 227.
Eastman, C. R. 1907 B, 23.
Goodrich, E. S. 1909 A, 187.
Gregory, W. K. 1907 D, 445 (Cladoselachii, Cladoselachidæ).
1915 D, 343 (Cladoselachii).
Hay, O. P. 1901 B, 61, 69.
Jordan, D. S. 1923 A, 91.
Osburn, R. G. 1907 B, 173.
Regan, C. T. 1906 A, 722.
Stromer, E. 1912 A, 23 (Cladoselachii).
Versluys, J. 1922 B, 102 (Cladoselachii).
Woodward, A. S. 1920 B, 5.

CLADOSELACHE Dean. Type *Cladodus fyleri* (Newb.).

Hay, O. P. 1902 A, 272.
Abel, O. 1912 F, 518.
1920 A, 329.
Backman, G. 1913 A, 48.
Bridge, T. W. 1904 A, 438, 736.
Cunningham, J. T. 1897 A, 496.
1912 A, 252.
Dames, W. 1898 C, 331.

Daniel, J. F. 1922 A, 2, fig. 1.
Dean, B. 1902 A, 768.
1902 C, 702.
1909 C, 244, fig. 41.
Derjugin, K. 1910 B, 209.
Eastman, C. R. 1900 G, 287.
1901 C, 329.
1905 A, 48.
1907 B, 54.
1908 A, 99.
1911 B, 184.
Goodrich, E. S. 1904 A, 492
1908 A, 754.
1909 A, 184.
Hay, O. P. 1901 B, 66, 69.
Hussakof, L. 1910 B, 306.
Jaekel, O. 1909 D, 711, fig. 3.
Jordan, D. S. 1910 C, 186.
1923 A, 91.
Karpinsky, A. P. 1915 A, 129.
1925 A, 128.
Kemna, A. 1904 A, 20.
Kerr, J. G. 1900 A, 230.
Kiaer, J. 1924 A, 101, fig. 46.
Kingsley, J. S. 1925 A, 232, fig. 244.
Knipe, H. R. 1912 A, 40, fig.
Lull, R. S. 1918 B, 203.
Moodie, R. L. 1926 A, 69.
Osborn, H. F. 1916 E, 604, fig. 13.
Osburn, R. C. 1907 A, 425.
1907 B, 172.
Oswald, F. 1911 A, 407, fig. 5.
Pompeckj, J. F. 1913 A, 1122, 1124.
Regan, C. T. 1906 A, 731 (Cladoselachus).
Rennie, J. 1906 A, 431.
Reynolds, S. H. 1897 A, 31, 63, 129.
Semon, R. 1898 A, 105.
Stromer, E. 1905 G, 478.
Swinnerton, H. H. 1905 A, 373.
1911 A, 453, fig. 12.
Traquair, R. H. 1898 B, 44.
1900 C, 505.
Watson, D. M. S. 1925 A, 820, 824.
Woodward, A. S. 1897 C, 379.
1898 E, 329.
1906 C, 273.
1915 B, lxv.
1921 A, 179.
1921 B, 29, fig. 1.
1922 C, 64.
Zittel and Schlosser 1923 A, 54.
Zittel and Woodward 1902 A, 19.

Cladoselache acanthopterygius Dean.

Dean, B. 1909 C, 228, 237, 240, fig. 27.
Hussakof and Bryant 1919 A, 128, pl. xlv, text-fig. 43.
Upper Devonian (Cleveland); Ohio.

Cladoselache brachypterygius Dean.

Dean, B. 1909 C, 226, 240, pl. xxxii, text-figs. 22, 23, 26.
Hussakof and Bryant 1919 A, 129, pl. xlvi.
Upper Devonian (Cleveland); Ohio.

Cladoselache clarki (Claypole).

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 319, 351 (Cladodus).
Dean, B. 1909 C, 215, 220, 239, figs. 3, 13, 18a, 21.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Upper Devonian (Cleveland); Ohio.

Cladoselache desmopterygius Dean.

Dean, B. 1909 C, 227, 240, pl. xxix, text-fig. 24.
Hussakof and Bryant 1919 A, 130, pl. xlvii; text-figs. 44, 45.
Upper Devonian (Cleveland?); Ohio?

Cladoselache eastmani Dean.

Dean, B. 1909 C, 228, 240, fig. 25.
Hussakof and Bryant 1919 A, 19, 133, text-fig. 46.
Upper Devonian (Naples shale, Rhinestreet shale); New York.

Cladoselache fyleri (Newb.).

Hay, O. P. 1902 A, 272.
Abel, O. 1907 D, (162).
1919 A, 113, figs. 72, 74 (Cladodus).
1920 A, 329, fig. 520.
1921 A, 248, fig. 90 (Cladodus).
Backman, G. 1913 A, 50.
Böker, H. 1927 A, 36 (Cladodus).
Braus, H. 1901 A, 184, figs. 4, 6 (Cladodus).
Bridge, T. W. 1904 A, 437, fig. 249.
Claypole, E. W. 1903 A, 319, 346, 351 (Cladodus).
Dean, B. 1902 D, 273, pl. viii, pl. ix, fig. 3.
1909 C, 215, 239, pl. xxvi, text-figs. 1, 2, 5, 6, 9-11, 14-16, 19, 19a, 29-31, 34-36.
Eastman, C. R. 1907 B, 18, fig. 14.
1908 A, 61, 283, fig. 6.
1911 A, 16, fig. 3.
Frassetto, F. 1915 A, 5, figs. 1, 23, 24.
Goodrich, E. S. 1909 A, 185, figs. 152, 153.
Gregory, W. K. 1922 A, 5, fig. 2.
Hussakof, L. 1908 A, 26.
Hussakof and Bryant 1919 A, 134, pl. xlviii.
Hyde, J. E. 1926 A, 498.
Jaekel, O. 1909 D, 714, figs. 5, 6.
Jordan, D. S. 1905 A, i, 514, figs. 300-302.
Pompeckj, J. F. 1913 A, 1122.
Stensiö, E. A. 1925 A, 125.
Stromer, E. 1912 A, 22, fig. 30.
Woodward, A. S. 1890 F, 147 (Cladodus).
1906 C, 272, fig. 5.
1921 B, 31.
1924 A, 108, fig. 2.
Zittel and Koken 1911 A, 44, figs. 60, 61.
Upper Devonian (Cleveland); Ohio.

Cladoselache kepleri (Newb.).

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 319, 346, 350 (Cladodus).
Dean, B. 1902 D, 274.
1909 C, 215, 239, pl. xxviii, figs. 4, 8, 18, 20.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Hussakof, L. 1908 A, 27.
Hussakof and Bryant 1919 A, 135, pls. xlix, l; text-figs. 47, 48.
Hyde, J. E. 1926 A, 498.
Upper Devonian (Cleveland); Ohio.

Cladoselache magnificus (Claypole).

Hay, O. P. 1902 A, 269 (Cladodus).
Dean, B. 1909 C, 213, 241.
Savage, T. E. 1902 A, 262 (Cladodus).
Mississippian; Alabama, Illinois, Indiana, Iowa?

Cladoselache newberryi Dean.

Hay, O. P. 1902 A, 272.
Dean, B. 1909 C, 234, 240, pl. xxx, figs. 33, 38.
Hussakof, L. 1908 A, 27.
Hussakof and Bryant 1919 A, 128, 138, text-fig. 49.
Zittel and Woodward 1902 A, 19, fig. 34.
Mississippian (Waverly); Ohio.

Cladoselache pachypterygius Dean.

Dean, B. 1909 C, 222, 241, fig. 17.
Mississippian (Waverly); Kentucky.

Cladoselache rivi-petrosi (Claypole).

Hay, O. P. 1902 A, 269 (Cladodus).
Claypole, E. W. 1903 A, 319, 351 (Cladodus).
Dean, B. 1902 C, 702 ("Cladoselacha").
Eastman, C. R. 1907 B, 18 (Cladodus).
1908 A, 283 (Cladodus).
Upper Devonian (Cleveland); Ohio.

Cladoselache sinuatus (Claypole).

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 319, 351 (Cladodus).
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Upper Devonian (Cleveland); Ohio.

Cladoselache sp. indet.

Eastman, C. R. 1907 B, 17, 58, pl. viii. Upper Devonian (Chemung Portage); New York.
1908 A, 281. Upper Devonian (Chemung Portage); New York.
Hussakof, L. 1908 A, 27. Upper Devonian, (Cleveland); Ohio.
Hyde, J. E. 1926 A, 502, fig. Devonian (Cleveland); Ohio.

CLADODONTIDÆ Nicholson and Lydekker.

Hay, O. P. 1902 A, 267.
Abel, O. 1919 A, 115.
Arldt, T. 1923 A, 483 ("cladodonten").
Braus, H. 1901 A, 179 ("cladodonten").
Cope, E. D. 1891 N, 15.
Dean, B. 1909 C, 242.
Dollo, L. 1889 F, 338.
1903 D, 701 ("cladodontes").
1906 B, 136 ("cladodontes").
Eastman, C. R. 1907 B, 23, 61.
1908 A, 107.
1917 A, 254.
Gill, T. 1885 A, lxiv.
Goodrich, E. S. 1909 A, 183.
Hay, O. P. 1901 B, 66, 69.
Jordan, D. S. 1905 A, i, 520; ii, 563.
1923 A, 92.
Koken, E. 1893 B, 253.
1904 A, 305 ("cladodontiden").
Regan, C. T. 1906 A, 722.
Rosén, N. 1916 A, 10.
Schlosser, M. 1917 A, 133 ("cladodontiden").
Stensiö, E. A. 1925 A, 125, 126 ("cladodontids, cladodonthids").
Zittel and Koken 1911 A, 44.
Zittel and Schlosser 1923 A, 52.

CLADODUS Agassiz. Type *C. mirabilis* Agassiz.

Hay, O. P. 1902 A, 267 (Cladodus); 272 (Styptobasis).
Abel, O. 1919 A, 114, figs. 73, 75.
1920 A, 329 (Syn. of Cladoselache).
Agassiz, L. 1844 C, 267.
Anonymous 1898 C, 74.
Backman, G. 1913 A, 51.
Barkas, W. J. 1874 B, 164, figs. 3-6.
1874 D, 545.
Böker, H. 1927 A, 36.
Braus, H. 1901 A, 183, fig. 2.
1904 A, 412.
Bronn, H. G. 1849 A, 650.
Clark, W. 1898 A, 46.
Claypole, E. W. 1903 A, 344, 347.
Cushing, H. P. 1912 A, 582.
Dames, W. 1898 C, 331.
Dean, B. 1902 A, 769.
1909 C, 249.
Dollo, L. 1889 F, 337.
Eastman, C. R. 1907 B, 61, 193.
1908 A, 107.
1917 A, 254.
Frassetto, F. 1915 A, 46.
Giebel, C. G. 1855 A, 114.
Goodrich, E. S. 1909 A, 50, 128, 184, figs. 68, 87.
Hay, O. P. 1901 B, 66, 69 (Cladodus, Styptobasis).
Hayden, F. V. 1872 A, 132.
Howes, G. B. 1894 A, 84.
Jaekel, O. 1892 B, 156.
1909 D, 711, figs. 4, 7.
1911 A, 60, fig. 60.
1913 A, 91.
1921 A, 228, fig. 8.
Jordan, D. S. 1919 B, 213.
1923 A, 92.
Karpinsky, A. 1915 A, 129.
Klaatsch, H. 1890 A, 122.
Moodie, R. L. 1926 A, 66.
Regan, C. T. 1906 A, 731.
Reis, O. M. 1894 A, 50.
Ridewood, W. G. 1896 A, 382, fig. 6
Rogers, A. F. 1924 A, 548.
Savage, T. E. 1902 A, 257.
Swinnerton, H. W. 1905 A, 373.
Teller, E. E. 1906 A, 164.
Thompson, J. 1872 A, 66.
Traquair, R. H. 1898 B, 41, pl. iv.
1900 C, 505.
1905 A, 83.
Twenhofel and Dunbar 1914 A, 160.

Weller, S. 1902 A, 427.
Woodward, A. S. 1924 A, 112.
Zittel and Koken 1911 A, 45.
Zittel and Schlosser 1923 A, 52, 54, fig. 70.
Zittel and Woodward 1902 A, 19.

Cladodus aculeatus (Cope).

Hay, O. P. 1902 A, 272 (Styptobasis).
Pennsylvanian; Illinois.

Cladodus acuminatus Newb.

Hay, O. P. 1902 A, 267.
Pennsylvanian; Ohio.

Cladodus alternatus St. John and Worth.

Hay, O. P. 1902 A, 268.
Eastman, C. R. 1908 A, 111.
Hennig, E. 1920 A, 17.
Mississippian (Kinderhook, Burlington); Iowa.

Cladodus angulatus Newb. and Worth.

Hay, O. P. 1902 A, 268.
Mississippian (Keokuk); Illinois.

Cladodus bellifer St. John and Worth.

Hay, O. P. 1902 A, 268.
Brongniart, C. 1888 C, 45, 47.
Mississippian (Burlington); Iowa.

Cladodus carinatus St. John and Worth.

Hay, O. P. 1902 A, 268.
Claypole, E. W. 1903 A, 319, 346.
Pennsylvanian; Illinois, Iowa.

Cladodus claypolei Hay.

Hay, O. P. 1902 A, 268.
Eastman, C. R. 1907 B, 18.
1908 A, 282.
Upper Devonian (Cleveland); Ohio.

Cladodus compressus Branson.

Branson, E. B. 1908 A, 312.
Branson, E. B. 1906 A, 1378, pl. xlii, figs. 1-4 (C. striatus, not of Agassiz).
Eastman, C. R. 1917 A, 256.
Hussakof, L. 1908 A, 24.
Mississippian (Salem); Indiana.

Cladodus concinnus Newb.

Hay, O. P. 1902 A, 268.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
1915 A, 283.
Hussakof, L. 1908 A, 25.
Upper Devonian (Cleveland, Huron shale); Ohio.

Cladodus coniger Hay.

Hay, O. P. 1902 A, 268.
Eastman, C. R. 1907 B, 20, 63.
1908 A, 109, 287.
Hennig, E. 1920 A, 17.
Hussakof and Bryant 1919 A, 139.
Upper Devonian (Chemung); Pennsylvania.

Cladodus costatus Newb. and Worth.

Hay, O. P. 1902 A, 268.
Mississippian (Chester); Illinois.

Cladodus deflexus Newb. and Worth.

Hay, O. P. 1902 A, 268.
Mississippian (Burlington); Illinois.

Cladodus eboreus nom. nov.

Eastman, C. R. 1917 A, 255, pl. x, fig. 4; pl. xviii, fig. 1 (C. aculeatus, preoccupied).
Mississippian? (Caney); Oklahoma.

Cladodus eccentricus St. John and Worth.

Hay, O. P. 1902 A, 268.
Mississippian (St. Louis); Illinois, Missouri.

Cladodus elegans Newb. and Worth.

Hay, O. P. 1902 A, 268.
Mississippian (St. Louis); Missouri.

Cladodus euglypheus St. John and Worth.

Hay, O. P. 1902 A, 268.
Branson, E. B. 1906 A, 1378 (C. euglyphæus).
1908 A, 312.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Cladodus exiguus St. John and Worth.

Hay, O. P. 1902 A, 268.
Eastman, C. R. 1908 A, 111.
Hennig, E. 1920 A, 17.
Mississippian (Kinderhook); Iowa.

Cladodus exilis St. John and Worth.

Hay, O. P. 1902 A, 268.
Eastman, C. R. 1908 A, 111.
Hennig, E. 1920 A, 17.
Mississippian (Kinderhook); Iowa.

Cladodus ferox Newb. and Worth.

Hay, O. P. 1902 A, 268.
Branson, E. B. 1906 A, 1376, pl. xli, figs. 3, 4.
Mississippian (St. Louis); Missouri; (Salem); Indiana.

Cladodus formosus Hay.

Hay, O. P. 1902 D, 373, figure 1.
Cross, W. 1905 C, 5.
Eastman, C. R. 1908 A, 110, 286.
1915 A, 283.
Hennig, E. 1920 A, 17.
Merrill, G. P. 1907 A, 7.
Upper Devonian (Ouray); Colorado.

Cladodus fulleri St. John and Worth.

Hay, O. P. 1902 A, 268.
Pennsylvanian; Illinois, Iowa.

Cladodus girtyi Hay.

Hay, O. P. 1902 A, 268.
Cockerell, T. D. A. 1908 C, 161.
Eastman, C. R. 1903 B, 169.
Merrill, G. P. 1907 A, 7.
Pennsylvanian; Colorado.

Cladodus gomphoides St. John and Worth.
Hay, O. P. 1902 A, 268.
Mississippian (Burlington); Iowa.

Cladodus gracilis Newb. and Worth.
Hay, O. P. 1902 A, 268.
Eastman, C. R. 1917 A, 255.
Pennsylvanian; Indiana.

Cladodus grandis Newb. and Worth.
Hay, O. P. 1902 A, 268.
Mississippian (Chester); Illinois.

Cladodus hertzeri Newb.
Hay, O. P. 1902 A, 268.
Hussakof, L. 1908 A, 25.
Mississippian (Waverly); Ohio.

Cladodus horridus Newb.
Newberry, J. S. 1874 G, 98 (No description).
Mississippian (Waverly); Kentucky or Ohio.

Cladodus indianensis Branson.
Branson, E. B. 1906 A, 1377, pl. xlii, figs. 5-8.
Mississippian (Salem); Indiana.

Cladodus intercostatus St. John and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Burlington, Keokuk); Iowa, Illinois.

Cladodus irregularis Strong.
Strong, E. A. 1872 A, 2.
Mississippian; Michigan.

Cladodus ischypus Newb. and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (St. Louis); Missouri.

Cladodus keokuk St. John and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Keokuk); Iowa, Illinois.

Cladodus knightianus (Cope).
Hay, O. P. 1902 A, 272 (Styptobasis).
Eastman, C. R. 1903 B, 168, pl. ii, fig. 4.
Knight, W. C. 1899 A, 365 (Styptobasis).
Permian (Chase); Nebraska.

Cladodus lamnoides Newb. and Worth.
Hay, O. P. 1902 A, 269.
Branson, E. B. 1906 A, 1378, pl. xlii, figs. 9, 10.
Mississippian (Keokuk); Illinois: (Salem); Indiana.

Cladodus micropus Newb. and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Keokuk); Illinois.

Cladodus monroei Eastman.
Hay, O. P. 1902 A, 269.
Cleland, H. F. 1911 A, 147, pl. xlvii, fig. 3.
Eastman, C. R. 1907 B, 15, 62, pl. i, fig. 5.
1908 A, 108, 276, pl. i, fig. 17.
Hennig, E. 1920 A, 17.
Teller, E. E. 1911 A, 270.
Middle Devonian (Hamilton); Wisconsin.

Cladodus mortifer Newb. and Worth.
Hay, O. P. 1902 A, 269.
Branson, E. B. 1916 A, 652 (Syn. of *C. occidentalis*).
Hayden, F. V. 1872 A, 127.
Hussakof, L. 1908 A, 25.
Mason, S. C. 1883 A, 13.
Meek, F. B. 1869 A, 3.
1872 A, 101, 127.
Pennsylvanian; Illinois, Kansas.

Cladodus newmani Tuomey.
Hay, O. P. 1902 A, 269.
Mississippian; Alabama.

Cladodus occidentalis Leidy.
Hay, O. P. 1902 A, 269.
Branson, E. B. 1916 A, 652, pl. ii, figs. 23, 24.
Eastman, C. R. 1903 B, 168, 169, pl. ii, figs. 3, 8, 9.
Pennsylvanian (Missourian); Kansas, Illinois, Indiana, Iowa, Nebraska, Wyoming.

Cladodus pandatus St. John and Worth.
Hay, O. P. 1902 A, 269.
Pennsylvanian; Illinois.

Cladodus parvulus Newb.
Hay, O. P. 1902 A, 269.
Claypole, E. W. 1903 A, 319, 321.
Hussakof, L. 1908 A, 25.
Devonian (Cleveland); Ohio.

Cladodus pattersoni Newb.
Hay, O. P. 1902 A, 269.
Claypole, E. W. 1903 A, 319, 321.
Miller, A. M. 1916 A, 72 ("Orodus").
Newberry, J. S. 1874 G, 94, 98.
Devonian (Waverly); Ohio, Kentucky.

Cladodus politus Newb. and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Chester); Illinois.

Cladodus prænuntius St. John and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Burlington); Iowa.

Cladodus prototypus Eastman.
Eastman, C. R. 1907 B, 13, 61, pl. i, fig. 15.
Eastman, C. R. 1908 A, 108, 276, pl. i, fig. 18.
Hennig, E. 1920 A, 17.
Hussakof, L. 1908 A, 25.
Stauffer, C. R. 1909 A, 169.
Middle Devonian (Columbus); Ohio.

Cladodus raricostatus St. John and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Keokuk); Iowa.

Cladodus robustus Newb. and Worth.
Hay, O. P. 1902 A, 269.
Mississippian (Keokuk); Illinois.

Cladodus romingeri Newb.
Hay, O. P. 1902 A, 269.
Hussakof, L. 1908 A, 25.
Mississippian (Waverly); Michigan.

Cladodus spinosus Newb. and Worth.
Hay, O. P. 1902 A, 269.
Branson, E. B. 1906 A, 1377, pl. xli, figs. 1, 2.
Eastman, C. R. 1917 A, 254, pl. viii, fig. 7.
Mississippian (St. Louis); Missouri; (Salem); Indiana.

Cladodus splendens Newb.
Hay, O. P. 1902 A, 269.
Weller, S. 1926 A, 495, fig.
Mississippian (Kinderhook); Iowa.

Cladodus springeri St. John and Worth.
Hay, O. P. 1902 A, 269.
Brongniart, C. 1888 C, 45, 47.
Eastman, C. R. 1908 A, 111.
Hennig, E. 1920 A, 17.
Mississippian (Kinderhook); Iowa.

Cladodus stenopus Newb. and Worth.
Hay, O. P. 1902 A, 270.
Branson, E. B. 1906 A, 1377.
Mississippian (St. Louis); Illinois.

Cladodus striatus Agassiz.
Hay, O. P. 1902 A, 270.
Branson, E. B. 1908 A, 311.
Eastman, C. R. 1899 A, 642.
Subcarboniferous; England, Ireland. Devonian (Corniferous); Ohio.

Cladodus subulatus Newb.
Hay, O. P. 1902 A, 270.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Upper Devonian (Cleveland); Ohio.

Cladodus succinctus St. John and Worth.
Hay, O. P. 1902 A, 270.
Eastman, C. R. 1908 A, 111.
Hennig, E. 1920 A, 17 (C. succinatus).
Mississippian (Kinderhook); Iowa.

Cladodus terrelli Newb.
Hay, O. P. 1902 A, 270.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Hussakof, L. 1908 A, 26.
Upper Devonian (Cleveland); Ohio.

Cladodus tumidus Newb.
Hay, O. P. 1902 A, 270.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Hussakof, L. 1908 A, 26.
Upper Devonian (Cleveland); Ohio.

Cladodus turritus Newb. and Worth.
Hay, O. P. 1902 A, 270.
Mississippian (Keokuk); Illinois.

Cladodus urbs-ludovici Eastman.
Eastman, C. R. 1908 A, 110, 281, pl. iii, fig. 3.
Hennig, E. 1920 A, 17.
Hussakof and Bryant 1919 A, 15, 17, 139, pl. xliv, fig. 1.
Upper Devonian (Genesee); Kentucky.

Cladodus vanhornei St. John and Worth.
Hay, O. P. 1902 A, 270.
Mississippian (St. Louis); Illinois.

Cladodus wachsmuthi St. John and Worth.
Hay, O. P. 1902 A, 270.
Eastman, C. R. 1908 A, 111.
Mississippian (Kinderhook); Iowa.

Cladodus zygopus Newb. and Worth.
Hay, O. P. 1902 A, 270.
Mississippian (Chester); Illinois.

Cladodus sp. indet.
Undetermined species of *Cladodus* have been reported as follows:
Branson, E. B. 1906 A, 1379, pl. xlii, fig. 11.
Mississippian (Salem); Indiana.
Clarke, J. M. 1885 A, 72. Upper Devonian (Chemung); New York.
Clarke and Luther 1904 A, 64. Devonian (Chemung); New York.
Eastman, C. R. 1907 B, 20, 63. Upper Devonian (Chemung); New York.
1908 A, 287. Upper Devonian (Chemung); New York.
Twenhofel and Dunbar 1914 A, 160. Pennsylvanian; Kansas.
Van Tuyl, F. M. 1925 A, 140. Mississippian (Burlington); Iowa.

PHŒBODUS St. John and Worth.

Hay, O. P. 1902 A, 270.
Eastman, C. R. 1901 A, 795.
1903 B, 195.
1907 B, 60.
1908 A, 105.
Hay, O. P. 1901 B, 66.
Hussakof and Bryant 1919 A, 148.
Jordan, D. S. 1923 A, 92.

Phœbodus dens-neptuni Eastman.
Eastman, C. R. 1903 B, 196; pl. iv, fig. 39.
Mississippian (Keokuk); Iowa.

Type *P. sophiæ* St. John and Worth.

Phœbodus duplicatus (Newb. and Worth.).
Hay, O. P. 1902 A, 267 (Thrinacodus).
Eastman, C. R. 1903 B, 195.
Keyes, C. R. 1897 A, 332.
Mississippian (Keokuk); Iowa.

Phœbodus incurvus (Newb. and Worth.).
Hay, O. P. 1902 A, 195 (Thrinacodus).
Eastman, C. R. 1903 B, 195.
Mississippian (Keokuk); Illinois, Iowa.

Phœbodus knightianus Eastman.

Eastman, C. R. 1913 B, 169; pl. iv, fig. 40.
Permo-Carboniferous (Chase); Nebraska.

Phœbodus macisaacsii (St. John and Worth.).

Hay, O. P. 1902 A, 270.
Eastman, C. R. 1908 A, 106.
Middle Devonian (Cedar Valley); Iowa.

Phœbodus politus Newb.

Hay, O. P. 1902 A, 270.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 18, 50, 233; pl. i, fig. 12.
1908 A, 106, 282; pl. i, fig. 9.
Hussakof, L. 1908 A, 28.
Upper Devonian (Cleveland); Ohio.

Phœbodus sophiæ St. John and Worth.

Hay, O. P. 1902 A, 270.
Eastman, C. R. 1908 A, 107 (Syn.? of P. macisaacsii).
Middle Devonian (Cedar Valley); Iowa.

Phœbodus springeri (St. John and Worth.).

Hay, O. P. 1902 A, 270.
Mississippian (Kinderhook, Burlington); Iowa.

LAMBDODUS St. John and Worth. Type *L. costatus* St. John and Worth.

Hay, O. P. 1902 A, 270.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 92.
Traquair, R. H. 1905 A, 83.

Lambdodus calceolus St. John and Worth.

Hay, O. P. 1902 A, 270.
Mississippian (Burlington); Iowa, Illinois: (Keokuk); Illinois, Iowa, Missouri.

Lambdodus costatus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Burlington); Iowa, Illinois: (Keokuk); Illinois, Iowa, Missouri.

Lambdodus hamulus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Chester); Illinois.

Lambdodus reflexus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Chester); Illinois.

Lambdodus transversus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (St. Louis); Illinois.

CARCHAROPSIS Agassiz. Type *C. prototypus* Agassiz.

Hay, O. P. 1902 A, 271.
Arldt, T. 1923 A, 484.
Barkas, W. J. 1874 D, 545.
Bronn, H. G. 1848 A, 220.
1849 A, 646.
Eastman, C. R. 1917 A, 256 (Dicrenodus).
Giebel, C. G. 1855 A, 116 (Dicrenodus).
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 214 (Syn. of Dicrenodus).
1920 C, 422 (Syn. of Dicrenodus).
1923 A, 93.
Karpinsky, A. 1902 A, 214.

Carcharopsis texanus (Eastman).

Eastman, C. R. 1917 A, 256, pl. vii, fig. 4. (Dicrenodus.)
Pennsylvanian; Texas.

Carcharopsis wortheni Newb.

Hay, O. P. 1902 A, 271.
Eastman, C. R. 1917 A, 256.
Mississippian; Alabama.

HYBOCLADODUS St. John and Worth. Type *H. plicatilis* St. J. and Worth.

Hay, O. P. 1902 A, 271.
1901 B, 66.
Jordan, D. S. 1923 A, 92.
Traquair, R. H. 1905 A, 83.

Hybocladodus compressus (Newb. and Worth.).

Hay, O. P. 1902 A, 271.
Mississippian (Burlington); Iowa.

Hybocladodus intermedius St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Keokuk); Illinois, Iowa.

Hybocladodus nitidus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Chester); Illinois.

Hybocladodus plicatilis St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Burlington); Iowa.

Hybocladodus tenuicostatus St. John and Worth.

Hay, O. P. 1902 A, 271.
Mississippian (Keokuk); Illinois, Iowa.

MONOCLADODUS Claypole. Type *M. clarki* Claypole.

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 347, 351.
Dean, B. 1909 C, 216. (Genus "abandoned.")
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 92.
Traquair, R. H. 1905 A, 83.

Monocladodus clarki Claypole.

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 319, 351.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Upper Devonian (Cleveland); Ohio.

Monocladodus pinnatus Claypole.

Hay, O. P. 1902 A, 272.
Claypole, E. W. 1903 A, 319, 352.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Upper Devonian (Cleveland); Ohio.

SYMMORIIDÆ Dean.

Dean, B. 1909 C, 242.

SYMMORIUM Cope. Type *S. reniforme* Cope.

Hay, O. P. 1902 A, 271.
Braus, H. 1901 A, 189.
Dean, B. 1902 A, 769, 772.
1909 C, 253.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 92.
Regan, C. T. 1906 A, 731.

Symmorium reniforme Cope.

Hay, O. P. 1902 A, 271.
Backman, G. 1913 A, 50, 52.
Braus, H. 1904 A, 412.
1901 A, 182, fig. 3.
Goodrich, E. S. 1909 A, 128, fig. 87.
Pennsylvanian; Illinois.

Superorder ICHTHYOTOMI Cope.

Hay, O. P. 1902 A, 263 (Ichthyotomi, Pleuracanthides.)
Abel, O. 1912 F, 440.
1919 A, 116.
1920 A, 329.
Arldt, T. 1923 A, 483 ("ichthyotomen").
Backman, G. 1915 A, 24.
Braus, H. 1901 B, 218 ("pleuracanthiden").
Bridge, T. W. 1904 A, 438, 743.
Cope, E. D. 1885 EE, 613.
1891 N, 15.
1900 A, 22 (Pleuracanthia).
Dean, B. 1894 A, 110.
1900 A, 22.
1902 C, 702.
1909 C, 242.
Depéret, C. 1907 B ("ichthyotomes").
Eastman, C. R. 1902 C, 702.
1907 B, 23, 58.
1908 A, 69, 101.
Gill, T. 1905 A, 657.
Goodrich, E. S. 1904 A, 493.
1908 A, 753 (Pleuracanthodii).
1909 A, 180 (Pleuracanthodii).
Gregory, W. K. 1907 D, 445 (Ichthyotomi, Pleuracanthidæ).
Hæckel, E. 1893 A, xxiv (Proselachii).
Jordan, D. S. 1905 A, i, 516, 520; ii, 218, 576.
1907 B, 186, 219, 758.
1923 A, 91.
Kehrer, F. A. 1896 A, 348 ("proselachier").
Lütken, C. 1868 C (Pleuracanthini).
Osburn, R. C. 1907 A, 415 ("primitive sharks").
Parker and Haswell 1897 A, 155 (Pleuracantha).
Pompeckj, J. F. 1913 A, 1121.
Regan, C. T. 1906 A, 722.
1912 A, 836.
Reynolds, S. H. 1897 A, 31, 62, 116, 130.
Rosén, N. 1916 A, 10, 30.
Schlosser, M. 1917 A, 147, 148.
Sewertzoff, A. N. 1926 A, 536 (Pleurocanthodii).
1926 B, 577.
Stromer, E. 1912 A, 23.
Versluys, J. 1922 B, 102.
Woodward, A. S. 1911 C, 46 ("pleuracanths").
1921 B, 33.
1922 C, 66.
1924 A, 108.
Zittel and Koken 1911 A, 41.
Zittel and Schlosser 1923 A, 47, 49.
Zittel and Woodward 1902 A, 22.

XENACANTHIDÆ Hoernes.

Hoernes, R. 1886 A, 544 (earliest?).
Unless otherwise indicated the authors, as quoted, use for this family the name Pleuracanthidæ.
Hay, O. P. 1902 A, 263.
Abel, O. 1919 A, 118.
Arldt, T. 1907 D, 252, 283 (Xenacanthidæ).
Backman, G. 1913 A, 49 ("pleuracanthiden").
Braus, H. 1901 A, 190 ("pleuracanthiden").
1904 A, 395 ("xenacanthiden").
1906 A, 173 ("xenacanthiden").
Bridge, T. W. 1904 A, 440.
Cope, E. D. 1891 N, 15.
Dean, B. 1894 A ("xenacanthids").
1906 B, 155 ("pleuracanths").
Dollo, L. 1889 F, 338.
1903 D, 701 ("pleuracanthes").
1906 B, 136 ("pleuracanthiens").
Evans, H. M. 1923 A, 17.
Fuchs, H. 1907 C, 27 ("pleuracanthiden").
Fürbringer, M. 1902 A, 194 (Xenacanthidæ).
1904 B, 459, 489 ("pleuracanthiden").
Gaupp, E. 1905 D, 877 ("pleuracanthiden").
Gill, T. 1898 A, 697 (Xenacanthini).

Goodrich, E. S. 1909 A, 183.
Hay, O. P. 1901 B, 66, 69.
Hilzheimer, M. 1913 A, 470.
Hussakof, L. 1914 A, 267 ("pleuracanths").
Jaekel, O. 1909 D, 717 ("pleuracanthiden").
1911 A, 61 ("pleuracanthiden").
1913 A, 91 ("pleuracanthiden").
Jordan, D. S. 1905 A, i, 520; ii, 586.
1907 B, 758.
1923 A, 91 (Xenacanthidæ).
Klaatsch, H. 1890 A, 122 ("xenacanthiden").
Koken, E. 1893 B, 253 ("pleuracanthiden").
1904 A, 305 ("pleuracanthiden").
Matthes, E. 1921 A, 225 (Pleuracanthus).
Osburn, R. C. 1907 B, 173.
Pompeckj, J. F. 1913 A, 1122 (Pleuracanthi).
Rosén, N. 1916 A, 10.
Schlosser, M. 1917 A, 133 ("pleuracanthiden").
Schmalhausen, J. J. 1916 B, 147.
Stensiö, E. A. 1925 A, 126 ("pleuracanthids").
Stromer, E. 1925 A, 19.
Traquair, R. H. 1900 C, 505, 506.
Woodward, A. S. 1920 B, 5.
Zittel and Koken 1911 A, 42.
Zittel and Schlosser 1923 A, 50.
Zittel and Woodward 1902 A, 23.

XENACANTHUS Beyrich. Type *Orthacanthus decheni* Goldfuss.

Beyrich, E. 1848, Archiv Min., Geog., etc., Berlin, 24.
Unless otherwise indicated the authors, as cited, use *Pleuracanthus*, which is preoccupied.
Hay, O. P. 1902 A, 263.
Abel, O. 1907 D, (159).
1908 E, 410, fig. 4.
1919 A, 118, fig. 76.
1920 A, 329.
1921 A, 160, fig. 25.
Backman, G. 1913 A, 48.
Barkas, W. J. 1874 D, 547, 548 (Pleuracanthus, Xenacanthus).
Beyrich, E. 1848 B, 646.
Braus, H. 1904 A, 395, fig. 6 (Xenacanthus).
Bridge, T. W. 1904 A, 438, 751, fig. 250.
Broili, F. 1904 B, 483.
Bronn, H. G. 1849 A, 640.
Case, E. C. 1915 A, 124.
1926 B, 195 (Pleuracanthus).
Cope, E. D. 1891 N, 15, fig. 6.
Cunningham, J. T. 1897 A, 492, 496.
1912 A, 253.
Deecke, W. 1913 A, 72.
Dollo, L. 1889 F, 335.
1906 B, 136.
Eastman, C. R. 1908 A, 103, fig. 16.
Evans, H. M. 1923 A, 17, text-figs. 10-14.
Fürbringer, M. 1902 A, 194 (Xenacanthus).
Gill, T. 1881 A, 370.
Gaupp, E. 1905 D, 874.
Goette, A. 1901 A, 564, fig.
Goodrich, E. S. 1904 A, 493 (Xenacanthus).
1901 A, 315, figs. D, E.
1909 A, 180, figs. 146-151.
Gregory, W. K. 1904 A, 59.
1915 D, 345.
Hay, O. P. 1901 B, 66 (Pleuracanthus, Xenacanthus).
Hilzheimer, M. 1913 A, 470, fig. 5.
Huber, O. 1901 A, 605 (Xenacanthus).
Hussakof, L. 1911 A, 157.
1914 A, 266.
Huxley, T. H. 1862 A, xlix.
Jaekel, O. 1905 C, 137; fig. 2.
1906 A, 14, fig. 7.
1906 C, 155.
1911 A, 60; fig. 61.
1913 A, 78, fig. 1.
Jordan, D. S. 1905 A, i, 521 (Orthacanthus, Xenacanthus).
Jordan, D. S. 1919 B, 213 (Orthacanthus); 233 (Xenacanthus).
1923 A, 92 (Xenacanthus).
Kehrer, F. A. 1896 A, 348.
Kingsley, J. S. 1925 A, 29, fig. 29.
Koken, E. 1897 B, 253 (Xenacanthus).
1907 A, 268.
Luther, A. 1909 A, 14, 49.
Meek, A. 1916 A, 34, 38.
Osburn, R. C. 1907 A, 425.
1907 B, 172.
Oswald, F. 1911 A, 407, fig. 6.
Pompeckj, J. F. 1913 A, 1123, fig. 22.
Price, P. H. 1927 A, 228, text-fig. 9.
Reis, O. M. 1894 A, 61.
Reynolds, S. H. 1897 A, 130.
Schmalhausen, J. J. 1913 A, 21.
Sewertzoff, A. N. 1923 B.
1926 B, 578, fig. 12c.
Steinmann, G. 1907 A, 402, figs. 697, 698.
Stensiö, E. A. 1925 A, 206.
1925 B, 189.
Thomson, J. 1873 A, 187.
Traquair, R. H. 1898 B, 46.
Wellburn, E. D. 1901 B, 161.
Woodward, A. S. 1898 B, 20, 33, figs. 17, 18, 22, 26.
1915 B, lxv.
1921 B, 30, 33, fig. 1.
1922 C, 66, fig. 62.
1924 A, 108, fig. 2.
1924 B, 340.
Zierler, F. E. 1905 A, 511.
Zittel and Koken 1911 A, 43, fig. 55.
Zittel and Schlosser 1923 A, 50, figs. 66-69.
Zittel and Woodward 1902 A, 23.
Jordan (1923 A, 91) regards *Orthacanthus* as a genus distinct from *Xenacanthus*.

Xenacanthus arcuatus (Newb.).

Hay, O. P. 1902 A, 264 (Pleuracanthus).
Pennsylvanian (Coal-measures); Ohio.

Xenacanthus biserialis (Newb.).

Hay, O. P. 1902 A, 264 (Pleuracanthus).
Pennsylvanian (Coal-measures); Ohio.

Xenacanthus dilatatus (Newb.).

Hay, O. P. 1902 A, 264 (Pleuracanthus).
Pennsylvanian; Ohio.

Xenacanthus quadriseriatus (Cope).

Hay, O. P. 1902 A, 264 (Pleuracanthus).
Case, E. C. 1900 A, 700, pl. i, fig. 3 [P. (Orthacanthus)].
1915 A, 96 (Pleuracanthus).
Cope and Matthew 1915 A, pl. iii, fig. 1 (Orthacanthus, Pleuracanthus).
Hussakof, L. 1911 A, 158, pl. xxvi, fig. 3 (Pleuracanthus).
Pennsylvanian (Upper); Illinois: (Wichita, Clear Fork); Texas: (Enid); Oklahoma.

Xenacanthus sp. indet.

Van Tuyl, F. M. 1925 A, 149, 154 (Pleuracanthus).
Mississippian (Burlington, Keokuk); Iowa.

ORTHACANTHUS Agassiz. Type *O. cylindricus* Agassiz.

Hay, O. P. 1902 A, 264.
Barkas, W. J. 1874 D, 547.
Beyrich, E. 1848 B, 649.
Bronn, H. G. 1849 A, 540.
Davis, J. W. 1880 C, 61.
Goldfuss, A. 1847 A, 23, pl. v, figs. 9-11.
Goodrich, E. S. 1909 A, 193.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 213.
1923 A, 91, 92.

Orthacanthus gracilis Newb.

Hay, O. P. 1902 A, 264.
Case, E. C. 1900 A, 701, pl. i, fig. 4 [Pleuracanthus (Orthacanthus)].
1915 A, 96 (Pleuracanthus).
Hussakof, L. 1911 A, 158, pl. xxvi, fig. 4 (Pleuracanthus).
This species belongs not improbably to *Xenacanthus*.
Pennsylvanian (Upper); Ohio.

COMPSACANTHUS Newb. Type *Pleuracanthus lævis* Newb.

Hay, O. P. 1902 A, 265.
Barkas, W. J. 1874 D, 545.
Davis, J. W. 1880 C, 62.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 273 (Syn. of Pleuracanthus).
1923 A, 92.

Compsacanthus lævis Newb.

Hay, O. P. 1902 A, 265.
Pennsylvanian (Linton); Ohio.

DIACRANODUS Garman. Type *Didymodus ? compressus* Cope = *D. texensis* Cope.

Hay, O. P. 1902 A, 265.
Broili, F., 1904 B, 467.
Case, E. C. 1915 A, 124.
Hay, O. P. 1901 B, 66.
Hussakof, L. 1911 A, 159.
1914 A, 266.
Jordan, D. S. 1919 B, 186 (Dicranodus).
1923 A, 92.

Diacranodus platypternus (Cope).

Hay, O. P. 1902 A, 265.
Beede, J. W. 1907 A, 119.
Case, E. C. 1915 A, 96.
Eastman, C. R. 1903 B, 168 (Diplodus).
Hussakof, L. 1908 A, 28 (Pleurocanthus).
1911 A, 160, pl. xxx, fig. 8.
Permian (Wichita? Clear Fork?); Texas.

Diacranodus texensis (Cope).

Hay, O. P. 1902 A, 265.
Beede, J. W. 1907 A, 119, 139 (=D. compressus?).
Broili, F. 1904 B, 467, pls. xxiv, xxv.
Case, E. C. 1900 A, 701, pl. i, fig. 5 (Pleuracanthus compressus).
1902 B, 62, 63 (D. compressus?).
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, figs. 2-4 (D. texensis, Diplodus compressus).
Hickling, G. 1917 A, 79.
Hussakof, L. 1908 A, 28 (Pleurocanthus).
1911 A, 159, pls. xxviii, xxix, pl. xxx, fig. 9
Jordan, D. S. 1905 A, i, 521 (Dicranodus).
Stromer, E. 1912 A, 4, fig. 4.
Permian (Wichita? Clear Fork?); Texas: (Enid); Oklahoma.

Diacranodus sp. indet.

Wegeman, C. H. 1915 A, 25.
Permian (Wichita); Oklahoma.

DITTODUS Owen. Type *Diplodus gibbosus* Agassiz.

Hay, O. P. 1902 A, 265.
Anonymous 1898 C, 74 (Diplodus).
Atthey, T. 1868 C, 352, 372 (Dittodus); 371 (Diplodus).
Barkas, W. J. 1874 D, 546 (Diplodus).
Bronn, H. G. 1848 A, 427 (Diplodus).
1849 A, 650 (Diplodus).
Case, E. C. 1903 C, 576 (Diplodus).
1917 A, 125 (Diplodus).
Davis, J. W. 1880 C, 61 (Diplodus).
Eastman, C. R. 1907 B, 58 (Diplodus).
1908 A, 104 (Diplodus).
Hay, O. P. 1901 B, 66.
Hussakof and Bryant 1919 A, 144.
Jordan, D. S. 1905 A, i, 521; ii, 567.
1907 B, 186.
1919 B, 180.
1923 A, 92.
Price, P. H. 1927 A, 215, 219, pls. xiv, xix; text-fig. 10 (Diplodus); 228 (Dittodus).
Ridewood, W. G. 1896 A, 383 (Diplodus).
Thomson, J. 1872 A, 66 (Diplodus).
1873 A, 187 (Diplodus).
Twenhofel and Dunbar 1914 A, 160 (Diplodus).

Wellburn, E. D. 1901 B, 162 (Diplodus; syn. of Pleuracanthus).
Williamson, W. C. 1851 A, 680 (Diplodus).
Zittel and Koken 1911 A, 43 (Diplodus).
Zittel and Schlosser 1923 A, 52 (Dittodus, Diplodus).

Dittodus acinaces (Dawson).
Hay, O. P. 1902 A, 266.
Lambe, L. M. 1904 C, 19, 35, 40.
Carboniferous (Coal Measures); Nova Scotia.

Dittodus compressus (Newb.).
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1902 B, 97 (Pleuracanthus).
1902 G, 540 (Pleuracanthus).
1903 B, 167, 194 (Pleuracanthus).
Hayden, F. V. 1872 A, 127 (Diplodus).
Meek, F. B. 1869 A, 3 (Diplodus).
1872 A, 127 (Diplodus).
Pennsylvanian; Ohio, Indiana, Illinois.

Dittodus gibbosus (Binney).
Hay, O. P. 1902 A, 266.
Coal-measures; England: Permian; Texas. The Texan specimens may have been wrongly identified.

Dittodus grabaui Hussakof and Bryant.
Hussakof and Bryant 1919 A, 15, 147, text-fig. 52.
Upper Devonian (Genesee); New York.

Dittodus gracilis (Newb.).
Hay, O. P. 1902 A, 266.
Pennsylvanian; Ohio.

Dittodus latus (Newb.).
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1902 B, 97 (Diplodus).
1902 G, 540 [Pleuracanthus (Diplodus)].
1903 B, 194 [Pleuracanthus (Diplodus)].
Hussakof, L. 1908 A, 28.
Pennsylvanian; Indiana, Ohio, Illinois.

Dittodus lucasi Hay.
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1902 B, 97 (Diplodus).
1902 G, 540 [Pleuracanthus (Diplodus)].
1903 B, 194 [Pleuracanthus (Diplodus)].
Merrill, G. P. 1907 A, 10.
Pennsylvanian; Illinois.

Dittodus penetrans (Dawson).
Hay, O. P. 1902 A, 266.
Lambe, L. M. 1904 C, 19, 35, 40.
Whiteaves, J. F. 1903 B, 29 (Diplodus. This species?).
Pennsylvanian; Nova Scotia.

Dittodus priscus (Eastman).
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1907 B, 20, 59, pl. i, figs. 7, 8 (Diplodus).
1908 A, 104, 286, pl. i, figs. 5, 13 (Diplodus).
Hussakof and Bryant 1919 A, 15, 17, 144, pl. xliv, figs. 3-3*b*, text-fig. 51.
Upper Devonian; Illinois: (Genesee); New York.

Dittodus striatus (Eastman).
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1907 B, 20, 60, pl. i, figs. 10, 11 (Diplodus).
1908 A, 105, 286, pl. i, figs. 1, 16 (Diplodus).
Hussakof and Bryant 1919 A, 15, 17, 146.
Upper Devonian; Illinois: (Genesee); New York.

Dittodus washingtonensis (Stauffer and Schroyer).
Stauffer and Schroyer 1920 A, 147, pl. xiii, fig. 40 (Diplodus).
Permian (Washington); Ohio.

Dittodus sp. indet.
Doubtful remains of this genus are reported as follows:
Bell, W. A. 1913 A, 340, 343 (Diplodus). Pennsylvanian (Joggins); Nova Scotia.
Bradley, F. H. 1866 A, 71 (Diplodus). Devonian (Hamilton); New York.
Eastman, C. R. 1907 B, 20 (Diplodus). Upper Devonian; Illinois.
1908 A, 286 (Diplodus).
Hussakof and Bryant 1919 A, 19, 149. Upper Devonian (Portage); New York: (Tully); New York.
Twenhofel and Dunbar 1914 A, 160. Pennsylvanian; Kansas.
Williston, S. W. 1897 K, 395 ("Didymodus"). Permian; Kansas.

PROTODUS A. S. Woodward. Type *P. jexi* A. S. Woodward.

Hay, O. P. 1902 A, 266.
Eastman, C. R. 1902 B, 56.
1902 H, 150.
1903 D, 285.
1908 A, 100.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 92.
Whiteaves, J. F. 1907 B, 255.
Woodward, A. S. 1904 C, 188, fig. 2.
1915 B, lxvi, fig. 1.
1920 B, 5.
Zittel and Woodward 1902 A, 20.

Protodus jexi A. S. Woodward.
Hay, O. P. 1902 A, 266.
Eastman, C. R. 1907 B, 13.
1908 A, 275.
Jaekel, O. 1895 C, 161.
Lambe, L. M. 1904 C, 33, 40.
Whiteaves, J. F. 1907 B, 256.
Lower Devonian; New Brunswick.

THRINACODUS St. John and Worth. Type *T. nanus* St. John and Worth.

Hay, O. P. 1902 A, 266.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 380.
1923 A, 92.

Thrinacodus bicornis Newb.

Hay, O. P. 1902 A, 267.

Branson, E. B. 1906 A, 1394.
Mississippian (Salem); Indiana.

Thrinacodus nanus St. John and Worth.

Hay, O. P. 1902 A, 267.
Mississippian (Kinderhook); Iowa.

DOLIODUS Traquair. Type *Diplodus problematicus* A. S. Woodward.

Hay, O. P. 1902 A, 267.
Hay, O. P. 1901 B, 66.

Doliodus problematicus (A. S. Woodward).

Hay, O. P. 1902 A, 267.

Eastman, C. R. 1907 B, 13.
1908 A, 275.
Jaekel, O. 1895 C, 161 (Diplodus).
Lambe, L. M. 1904 C, 16, 33, 40.
Whiteaves, J. F. 1907 B, 257.
Lower Devonian; New Brunswick.

Order ACANTHODEI Owen.

Owen, R. 1846 E, 50.
Hay, O. P. 1902 A, 273 (Acanthodii).
Abel, O. 1919 A, 147.
1920 A, 332.
1921 A, 249 (Acanthodii).
Agassiz, L. 1844 D, 142 ("acanthodiens").
Arldt, T. 1923 A, 483 ("acanthoden").
Barrell, J. 1915 B, 392, 402 (Acanthodii).
Bridge, T. W. 1904 A, 440.
Bronn, H. G. 1849 A, 780 seq.
Cope, E. D. 1891 N, 15, 18.
Cunningham, J. T. 1912 A, 253 ("acanthodians").
Dean, B. 1894 A, 88, 105, 109, 111 ("acanthodians").
1900 A, 22, 28 (Acanthodia).
1902 A, 770 ("acanthodians).
1907 B, 220 (Acanthodia).
1909 C, 242 (Acanthodia).
1912 A, 227 ("acanthodians").
Dollo, L. 1906 B, 135 ("acanthodiens").
Eastman, C. R. 1902 B, 92 (Acanthodii).
1907 B, 23, 63 (Acanthodii).
1908 A, 59, 69, 95, 112 (Acanthodii).
Frech, F. 1897 A, 123 (Acanthodii).
Giebel, C. G. 1855 A, 113 (Acanthodii).
Gill, T. 1905 A, 657.
Goodrich, E. S. 1904 A, 492 (Acanthodii).
1908 A, 771 (Acanthodii).
1909 A, 187 (Acanthodii).
Gregory, W. K. 1907 D, 445.
1915 D, 320, 343 (Acanthodii).
Haller, G. 1926 A, 447, 456 (Acanthodi).
Hay, O. P. 1901 B, 69 (Acanthodii).
Huene, F. 1926 A, 260 ("acanthodi").
Hussakof and Bryant 1919 A, 127, 140 (Acanthodii).
Jaekel, O. 1911 A, 69, 72 (Acanthodi).
Jordan, D. S. 1905 A, i, 514; ii, 555.
1907 B, 758.
1923 A, 91.
Kiaer, J. 1924 A, 100, 101, 102, 104, 108, 110 (Acanthodii).
Lütken, C. 1868 C (Acanthodini).
Meek, A. 1916 A, 34, 36.
Owen, R. 1860 E, 130 (Acanthodii).
1866 A, 12.
Parker and Haswell 1897 A, 155 (Acanthodea).
Pompeckj, J. F. 1913 A, 1120 (Acanthodi).
Regan, C. T. 1906 A, 722 (Acanthodii).
Rosén, N. 1916 A, 10, 30 (Acanthodii).
Schlosser, M. 1917 A, 133, 134, 147 ("acanthodier").
Schuchert and Levene 1927 A, 288 ("acanthodians").
Steinmann, G. 1907 A, 405 (Acanthodini).
Stromer, E. 1912 A, 23, 47 (Acanthodii).
1920 A, 11, 14, 17 (Acanthodi).
Versluys, J. 1922 B, 102 (Acanthodi).
1922 C, 62 (Acanthodii).
Woodward, A. S. 1906 A, 313 (Acanthodii).
1906 C, 270 ("acanthodians").
1910 D, 31 ("acanthodians").
1911 C, 45 ("acanthodian sharks").
1917 A, 75 ("acanthodians").
1924 A, 106 ("acanthodians").
Zittel and Koken 1911 A, 46 (Acanthodi).
Zittel and Schlosser 1923 A, 47 (Acanthodi).
Zittel and Woodward 1902 A, 20 (Acanthodii).

GYRACANTHIDÆ Woodward.

Woodward, A. S. 1906 D, 3.
Goodrich, E. S. 1909 A, 192.

Hussakof and Bryant 1919 A, 124, 142.
Jordan, D. S. 1923 A, 92.

GYRACANTHUS Agassiz. Type *G. formosus* Agassiz.

Hay, O. P. 1902 A, 335.
Agassiz, L. 1835 D, 189.
Atthey, T. 1868 C, 368.
Barkas, W. J. 1874 D, 546.
Bronn, H. G. 1848 A, 559.
1849 A, 649.

Connell, A. 1835 A, 301.
1835 B, 191 (Lepidosteus).
Dollo, L. 1889 F, 335.
Eastman, C. R. 1907 B, 86.
1908 A, 114.
Goodrich, E. S. 1909 A, 192, fig. 165.

Gregory, W. K. 1915 D, 343.
Heilprin, A. 1887 A, 152.
Hussakof and Bryant 1919 A, 140.
Jordan, D. S. 1919 B, 186.
1923 A, 92.
Lambe, L. M. 1916 A, 198.
Osburn, R. C. 1907 A, 432.
Reis, O. M. 1894 A, 60.
Thomson, J. 1872 A, 66.
Woodward, A. S. 1924 A, 107.

Gyracanthus alleni Newb.

Hay, O. P. 1902 A, 335.
Hussakof, L. 1908 A, 47.
Newberry, J. S. 1874 G, 98.
Mississippian (Waverly); Ohio.

Gyracanthus compressus Newb.

Hay, O. P. 1902 A, 335.
Hussakof, L. 1908 A, 48.
Newberry, J. S. 1874 G, 98.
Mississippian (Waverly); Ohio: Indiana.

Gyracanthus? cordatus St. John and Worth.

Hay, O. P. 1902 A, 335.
Mississippian (Keokuk); Missouri.

Gyracanthus duplicatus Dawson.

Hay, O. P. 1902 A, 335.
Bell, W. A. 1913 A, 340, 343.
Lambe, L. M. 1904 C, 19, 35, 42.
Carboniferous (Joggins); Nova Scotia.

Gyracanthus incurvus Traquair.

Hay, O. P. 1902 A, 335.
Eastman, C. R. 1907 B, 13.
1908 A, 276.
Hussakof and Bryant 1919 A, 143.
Lambe, L. M. 1904 C, 16, 34, 42.
Whiteaves, J. F. 1907 B, 258.
Lower Devonian; New Brunswick.

Gyracanthus inornatus Newb.

Hay, O. P. 1902 A, 335.
Hussakof, L. 1908 A, 48.
Mississippian (Waverly); Ohio.

Gyracanthus magnificus Dawson.

Hay, O. P. 1902 A, 335.
Lambe, L. M. 1904 C, 18, 34, 42.
Mississippian; Cape Breton.

Gyracanthus primævus Eastman.

Eastman, C. R. 1908 A, 114, fig. 17.
Hussakof and Bryant 1919 A, 143.
Devonian (Marcellus); New York.

Gyracanthus sarlei Hussakof and Bryant.

Hussakof and Bryant 1919 A, 142, pl. lii, figs. 3-5.
Upper Devonian (Genesee); New York.

Gyracanthus sherwoodi Newb.

Hay, O. P. 1902 A, 335.
Butts, C. 1903 A, 991.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 21, 22, 87, 230, pl. iii, fig. 7.
1908 A, 287, 289.
Hussakof, L. 1908 A, 48.
Upper Devonian (Catskill and Chemung); Pennsylvania: (Chemung); New York.

Gyracanthus sp. indet.

Hussakof and Bryant 1919 A, 15, 144, pl. lii fig. 4.
Upper Devonian (Genesee); New York.

ORACANTHUS Agassiz. Type *O. milleri* Agassiz.

Hay, O. P. 1902 A, 334.
Barkas, W. J. 1874 D, 547.
Bronn, H. G. 1848 B, 847.
1849 A, 649.
Dames, W. 1898 C, 331.
Eastman, C. R. 1902 H, 150.
1917 A, 267.
Egerton, P. G. 1853 C, 282.
Etheridge, R. 1877 A, 307, pl. xiii, figs. 4-6.
Evans, H. M. 1904 A, 399.
Goodrich, E. S. 1909 A, 193.
Heilprin, A. 1889 A, 152.
Jordan, D. S. 1919 B, 186 (Type *O. mülleri* Ag.).
Woodward, A. S. 1915 B, lxix, fig. 2.

Oracanthus lineatus Newb.

Hay, O. P. 1902 A, 334.
Mississippian. (Locality and formation not given.)

Oracanthus multiseriatus Newb.

Hay, O. P. 1902 A, 334.
Claypole, E. W. 1903 A, 318.
Devonian (Helderberg); Ohio.

Oracanthus? obliquus St. John and Worth.

Hay, O. P. 1902 A, 334.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Oracanthus pnigeus Newb. and Worth.

Hay, O. P. 1902 A, 334.
Mississippian (Keokuk); Iowa.

Oracanthus rectus St. John and Worth.

Hay, O. P. 1902 A, 335.
Eastman, C. R. 1917 A, 268.
Mississippian (Chester); Illinois.

Oracanthus triangularis Eastman.

Eastman, C. R. 1917 A, 268, pl. v, figs. 5, 6.
St. John and Worthen 1883 A, pl. xxiv, fig. 2 (*O. vetustus fide* Eastman).
Mississippian (St. Louis); Missouri.

Oracanthus trigonalis (St. John and Worth.).

Hay, O. P. 1902 A, 335.
Mississippian (St. Louis); Missouri.

Oracanthus vetustus Leidy.

Hay, O. P. 1902 A, 335.
Abel, O. 1912 F, 569, fig. 442.
Eastman, C. R. 1902 E, 852.
1903 B, 213.
Eastman, C. R. 1917 A, 267, 268, pl. vi, fig. 2.
Karpinsky, A. P. 1925 A, 136.

Mississippian (Kinderhook, St. Louis, Chester?); Missouri, Illinois.

ACANTHOËSSIDÆ Hay.

Unless otherwise indicated the authors, as quoted, use the name Acanthodidæ.

Hay, O. P. 1902 A, 273 (Acanthoëssidæ).
Abel, O. 1919 A, 151.
Arldt, T. 1907 D, 635.
1923 A, 483, 490 ("acanthodiden").
Bridge, T. W. 1878 A, 722.
1904 A, 441.
Carus, V. 1875 A, 595.
Cope, E. D. 1891 N, 19.
Coulon, L. 1903 A, 136.
Dean, B. 1907 B, 209 ("acanthodians").
Eastman, C. R. 1907 B, 23.
Goodrich, E. S. 1909 A, 192.
Gregory, W. K. 1907 D, 445.
Hay, O. P. 1901 B, 66, 69.
Hilzheimer, M. 1913 A, 471.
Hoernes, R. 1886 A, 548.
Huxley, T. H. 1861 D, 457.
Jaekel, O. 1899 C, 249 ("acanthodier")
Jordan, D. S. 1905 A, i, 516; ii, 555.
Jordan, D. S. 1907 B, 758.
1923 A, 91.
Kiaer, J. 1924 A, 108 (Acanthodii).
Lönnberg, E. 1901 A.
Lütken, C. 1871 A, 292, 294 ("acanthodiens").
Osburn, R. C. 1907 A, 425.
1907 B, 173.
Owen, R. 1866 A, 12 (Acanthodei).
Pompeckj, J. F. 1913 A, 1121.
Powrie, J. 1870 A, 287.
Reis, O. M. 1894 A, 49 ("acanthodinen").
Sewertzoff, A. N. 1923 B, 106.
Stensiö, E. A. 1925 B, 163 ("acanthodians").
Traquair, R. H. 1880 A, 147.
1890 A, 21.
1893 E, 176 ("acanthodians").
Trouessart, E. L. 1906 A, 213.
Woodward, A. S. 1915 B, lxv ("acanthodians").
Zittel and Koken 1911 A, 47.
Zittel and Schlosser 1923 A, 48.
Zittel and Woodward 1902 A, 20.

ACANTHOËSSUS Agassiz. Type *A. bronni* Agassiz.

Unless otherwise indicated the authors, as quoted, use the name *Acanthodes* for this genus. It is antedated by *Acanthoëssus.*

Agassiz, L. 1832 A, 149.
Hay, O. P. 1902 A, 273 (Acanthoëssus).
Abel, O. 1912 F, 518.
1919 A, 152, figs. 113-115.
1920 A, 332, fig. 528.
Agassiz, L. 1833 A, 471.
1835 H, 204.
1844 C, 269.
1877 A, 124.
Allis, E. P. 1905 A, 488.
Barkas, W. J. 1874 D, 548.
Bridge, T. W. 1904 A, 442, fig. 251.
Bronn, H. G. 1848 A, 2.
1849 A, 656.
Case, E. C. 1926 B, 105.
Coulon, L. 1903 A, 136 (Acanthodes = Cheiracanthus).
Cunningham, J. T. 1897 A, 496.
Dean, B. 1894 A, 99.
1902 A, 768.
1902 C, 702.
1907 B, 209.
Deecke, W. 1913 A, 72.
Dollo, L. 1906 B, 135.
Eastman, C. R. 1900 G, 287.
1902 G, 536.
Goodrich, E. S. 1908 A, 771, fig. 204.
1909 A, 505, figs.
Haller, G. 1926 A, 455, fig. 3.
Hay, O. P. 1901 B, 66, 69.
Hoernes, R. 1886 A, 548.
Huxley, T. H. 1861 D, 444.
Jaekel, O. 1892 B, 156.
1899 C, 250, figs. 1, 2.
1902 A, 108.
1902 C, 610.
1903 A, 123.
1903 F, 48, fig. 10.
1905 C, 136, fig. 1.
1906 A, 10, figs. 4, 8.
1907 A, 180, fig. 6.
1911 A, 71, fig. 75.
1913 A, 79, fig. 2.
1918 A, 231, fig. 1.
1919 A, 84, 108.
1921 A, 225, fig. 6.
1927 A, 266 (Acanthodes).
Jordan, D. S. 1903 A, 135.
1905 A, i, 516; ii, 555.
1919 B, 177.
1923 A, 91.
Jordan and Evermann 1917 A, 141, 145, 146.
Kiaer, J. 1924 A, 102, 108.
Klaatsch, H. 1890 A, 144.
Koken, E. 1907 A, 269.
Lütken, C. 1868 C, 69, fig. 11.
Matthes, E. 1921 A, 220, 225.
Miner, R. W. 1925 A, 195.
Oswald, F. 1911 A, 407, fig. 4.
Pompeckj, J. F. 1913 A, 1120, figs. 18, 19.
Powrie, J. 1870 A, 287, 288, pl. x.
Reis, O. M. 1893 A, 495.
1894 A, 49.
Rosén, N. 1916 A, 9, fig. 4.
Smith, B. 1910 A, 662 ("acanthodian").
Traquair, R. H. 1879 B, 115.
1879 C, 129.

Traquair, R. H. 1890 H, 482, fig. 1.
1893 E, 177.
Whiteaves, J. F. 1907 B, 247 (Mesacanthus).
Woodward, A. S. 1900 E, 203.
1906 C, 271, fig. 4.
1922 C, 63, fig. 60.
1924 A, 107, fig. 1.
Zittel and Koken 1911 A, 47.
Zittel and Schlosser 1923 A, 48, figs. 63, 64.
Zittel and Woodward 1902 A, 21.

Acanthoëssus affinis (Whiteaves).

Hay, O. P. 1902 A, 273.
Eastman, C. R. 1902 B, 93, 95 (Mesacanthus).
1902 G, 536 (Acanthodes).
1907 B, 16 (Acanthodes).
1908 A, 280 (Acanthodes).
Lambe, L. M. 1904 C, 34, 41 (Acanthodes).
Smith, B. 1910 A, 663 (Acanthodes).
Whiteaves, J. F. 1907 B, 247 (Mesacanthus).
Zittel and Woodward 1902 B, 21 (Mesacanthus).
Upper Devonian; Quebec.

Acanthoëssus beecheri (Eastman).

Eastman, C. R. 1902 B, 94, 97, fig. 14 (Acanthodes).
Eastman, C. R. 1902 G, 537, fig. 2 (Acanthodes).
1903 B, 194 (Acanthodes).
Pennsylvanian (Mazon Creek); Illinois.

Acanthoëssus concinnus (Whiteaves).

Hay, O. P. 1902 A, 273.
Clarke, J. M. 1913 A, 113 (Acanthodes).
Eastman, C. R. 1902 B, 93 (Mesacanthus).
1907 B, 16 (Acanthodes).
1908 A, 280 (Acanthodes).
Hussakof and Bryant 1919 A, 141, pl. fi, figs. 2, 3; text-fig. 50 (Acanthodes).
Lambe, L. M. 1904 C, 34, 41 (Acanthodes).
Smith, B. 1910 A, 663 (Acanthodes).
Whiteaves, J. F. 1907 B, 246 (Acanthodes).
Upper Devonian (Scaumenac); Quebec.

Acanthoëssus marshi (Eastman).

Eastman, C. R. 1902 B, 93, 97, pl. vi, fig. 3; pl. vii, figs. 1, 2 (Acanthodes).
Eastman, C. R. 1901 A, 795 (Acanthodes sp).
1902 G, 536, fig. 1 (Acanthodes).
1903 B, 194 (Acanthodes).
Pennsylvanian (Mazon Creek); Illinois.

Acanthoëssus? pristis (Clarke).

Hay, O. P. 1902 A, 273.
Clarke and Luther 1904 A, 62 (Acanthodes).
Eastman, C. R. 1902 B, 92 (Acanthodes?).
1902 G, 536 (Acanthodes).
1907 B, 17, 64 (Acanthodes?).
1908 A, 113, 281 (Acanthodes?).
Merrill, G. P. 1907 A, 5 (Acanthodes?).
Smith, B. 1910 A, 663 (Acanthodes?).
Upper Devonian (Portage); New York.

Acanthoëssus semistriatus (A. S. Woodward).

Hay, O. P. 1902 A, 273.
Eastman, C. R. 1907 B, 13 (Acanthodes).
1908 A, 275 (Acanthodes).
Lambe, L. M. 1904 C, 34, 41 (Acanthodes).
Smith, B. 1910 A, 663 (Acanthodes).
Whiteaves, J. F. 1907 B, 256 (Mesacanthus).
Lower Devonian; New Brunswick.

Cheiracanthus Agassiz. Type *C. murchisoni* Agassiz.

Hay, O. P. 1902 A, 274.
Agassiz, L. 1844 C, 269.
Barkas, W. J. 1874 D, 548 (Sphagodus); 549 (Cheiracanthus).
Bronn, H. G. 1848 A, 285.
1849 A, 656.
Coulon, L. 1903 A, 136. (= Acanthodes).
Dean, B. 1902 A, 768.
1907 B, 209.
Dollo, L. 1889 F, 337 (Sphenacanthus).
Egerton, P. G. 1861 B, 1, pl. x.
Goodrich, E. S. 1909 A, 189, fig. 158.
Hay, O. P. 1901 B, 66.
Huxley, T. H. 1861 D, 458.
Jordan, D. S. 1905 A, i, 517.
1923 A, 91.
Klaatsch, H. 1890 A, 144.
Osborn, H. F. 1917 B, 170, fig.
Zittel and Koken 1911 A, 47.
Zittel and Schlosser 1923 A, 49.
Zittel and Woodward 1902 A, 21.

Cheiracanthus costellatus Traquair.

Hay, O. P. 1902 A, 274.
Eastman, C. R. 1907 B, 13.
1908 A, 275.
Lambe, L. M. 1904 C, 34, 41.
Smith, B. 1910 A, 663.
Whiteaves, J. F. 1907 B, 256.
Zittel and Woodward 1902 A, 27 (Sphenacanthus).
Devonian (Lower); New Brunswick.

DIPLACANTHIDÆ Cope.

Cope, E. D. 1891 N, 19.
Hay, O. P. 1902 A, 274.
Arldt, T. 1923 A, 483 ("diplicanthiden").
Bridge, T. W. 1904 A, 441.
Eastman, C. R. 1907 B, 23.
1908 A, 112.
1917 A, 237.
Gregory, W. K. 1907 D, 445.
Jaekel, O. 1911 A, 72 (Diplacanthi).
Jordan, D. S. 1905 A, i, 517; ii, 566.
1907 B, 758.
1923 A, 91.
Kiaer, J. 1924 A, 102.
Osburn, R. C. 1907 A, 425.
Zittel and Koken 1911 A, 48.
Zittel and Schlosser 1923 A, 49.
Zittel and Woodward 1902 A, 22.

DIPLACANTHUS Agassiz. Type *D. crassisimus* Duff.

Hay, O. P. 1902 A, 274.
Agassiz, A. 1844 C, 269.
1877 A, 124.
Barkas, W. J. 1874 D, 550.
Bridge, T. W. 1904 A, 440.
Bronn, H. G. 1848 A, 426.
1849 A, 656.
Dean, B. 1902 A, 768.
1907 B, 209.
Egerton, P. G. 1854 A, 369.
Hay, O. P. 1901 B, 66.
Jaekel, O. 1911 A, 72, fig. 76.
Jordan, D. S. 1919 B, 210.
1923 A, 91.
Kiaer, J. 1924 A, 103, fig. 47.
Osborn, H. F. 1916 E, 606, fig. 14.
1917 B, 167, 170, fig.
Powrie, J. 1870 A, 287, 289, pl. x.
Traquair, R. H. 1893 E, 177.
Zittel and Koken 1911 A, 48.
Zittel and Woodward 1902 A, 22.

Diplacanthus crassisimus Duff.

Hay, O. P. 1902 A, 274.
Clarke, J. M. 1913 A, 115 (D. striatus).
Dean, B. 1907 B, 218 (D. striatus).
Eastman, C. R. 1907 B, 16 (D. striatus).
1908 A, 280 (D. striatus).
Lambe, L. M. 1904 C, 34, 40 (D. striatus).
Smith, B. 1910 A, 663 (D. striatus).
Devonian (Lower Old Red); Scotland.
Upper Devonian (Scaumenac); Quebec.

Diplacanthus horridus Woodward.

Woodward, A. S. 1892 C, 482, pl. xiii, fig. 1.
Clarke, J. M. 1913 A, 115.
Eastman, C. R. 1907 B, 16.
1908 A, 280.
Lambe, L. M. 1904 C, 34, 40.
Smith, B. 1910 A, 663.
Whiteaves, J. F. 1907 B, 247.
Upper Devonian (Scaumenac); Quebec.

Diplacanthus sp. indet.

Cockerell, T. D. A. 1913 A, 246.
Ordovician; Colorado.

CLIMATIUS Agassiz. Type *C. reticulatus* Agassiz.

Hay, O. P. 1902 A, 274.
Abel, O. 1907 D, (161).
1912 F, 207, 518, fig. 142.
1920 A, 333, fig. 528.
1921 A, 249, fig. 91.
Barkas, W. J. 1874 D, 549.
Barrell, J. 1915 B, 394.
Bökeŗ, H. 1927 A, 36.
Bridge, T. W. 1904 A, 441.
Bronn, H. G. 1848 A, 308.
1849 A, 653.
Cope, E. D. 1891 N, 19.
Cunningham, J. T. 1912 A, 252.
Dean, B. 1902 A, 768.
1907 B, 209.
1909 C, 244, fig. 39.
Derjugin, K. 1910 B, 209.
Hay, O. P. 1901 B, 66.
Goodrich, E. S. 1909 A, 192, fig. 164.
Jordan, D. S. 1905 A, i, 516; ii, 563.
1919 B, 225.
1923 A, 91.
Kerr, J. G. 1900 A, 230.
Kiaer, J. 1924 A, 103, fig. 46.
Oswald, F. 1911 A, 407, fig. 2.
Powrie, J. 1870 A, 287, 289, pls. xiii, xiv.
Pompeckj, J. F. 1913 A, 1121.
Traquair, R. H. 1900 C, 22.
Woodward, A. S. 1897 C, 379.
1906 A, 271, fig. 4.
Zittel and Koken 1911 A, 48.
Zittel and Schlosser 1923 A, 49, fig. 65.
Zittel and Woodward 1902 A, 22.

Climatius latispinosus (Whiteaves).

Hay, O. P. 1902 A, 274 (Climatius?).
Eastman, C. R. 1907 B, 13.
1908 A, 276.
Lambe, L. M. 1904 C, 33, 41 (Climatius?).
Smith, B. 1910 A, 663 (Climatius?).
Whiteaves, J. F. 1907 B, 257 (Climatius?).
Lower Devonian; New Brunswick.

Superorder ARISTOSELACHII Hay.

Hay, O. P. 1902 A, 252, 795 (Aristoselachii); 274 (Euselachii).
Dean, B. 1902 C, 702 (Selacha).
1909 C, 243 (Euselachii).
Haeckel, E. 1868 A, 444 (Plagiostomi).
Hussakof and Bryant 1919 A, 127 (Euselachii).
Jordan, D. S. 1923 A, 97 (Euselachii).
Parker and Haswell 1897 A, 156 (Selachii).
Regan, C. T. 1906 A, 722, 739 (Euselachii).
1912 A, 837 (Euselachii).

Order SELACHII Richardson.

Richardson, J. 1836 A, 287.
Hay, O. P. 1902 A, 274 (Selacha).
Abel, O. 1912 F, 676 ("haifische").
1920 A, 329 ("plagiostomen").
Ahlborn, F. 1896 B, 1 ("haifische").
Allis, E. P. 1909 A, 202.
1913 A, 322 ("selachians").
Allis, E. P. 1915 A.
1917 A, 105.
1919 C, 256.
1922 B, 198.
1923 B.
1926 A, 166.
1926 B, 339 (Plagiostomi).

Anonymous 1898 A, 373 (Selachoidea).
Arldt, T. 1907 D, 681.
1923 A, 483 ("plagiostomen").
Baehr, W. B. 1906 A, 629 ("selachier").
Bardeleben, K. 1893 A, 168 ("selachier").
Barrell, J. 1915 B, 402.
Beer, G. R. 1924 B, 59 ("selachians").
1924 C, 289 ("selachians").
1926 A, 266.
Beyer, H. 1907 A, 266 ("selachier").
Bolk, L. 1914 A, 118 ("selachier").
1915 A, 106.
1922 B, 69.
Bonaparte, C. L. 1838 C, 197 (Selacha).
1839 A, 3 (Selacha).
1840 A, 44 (Selacha).
Braus, H. 1899 A, 520 ("haie").
1906 B, 549 ("selachier").
Bridge, T. W. 1878 A, 706.
1904 A, 442 (Plagiostomi).
Brohl, E. 1909 A, 345 ("selachier").
Carter, J. T. 1905 A, 136.
Carus, V. 1875 A, 598 (Plagiostomi).
Collinge, W. E. 1893 C, 269 (Selachia).
Cope, E. D. 1891 N, 15.
Dana, J. C. 1863 C, 343 ("selachians").
1906 B, 549 ("selachians").
Dean, B. 1900 A, 22.
1906 B, 152 ("sharks").
1916 A ("fishes").
Dollo, L. 1889 E, 152 ("requins").
Dombrowski, B. A. 1925 A, 79 ("selachier").
Dormitzer, M. 1852 A, 61 ("selachier").
Drüner, L. 1904 A, 266 ("selachier").
Eastman, C. R. 1907 B, 23, 64.
1908 A, 69.
Edgeworth, F. H. 1907 A, 530 ("selachians").
1926 A, 173.
Eimer, G. H. T. 1901 A, 262 ("selachier").
Eternod, A. C. F. 1900 A, 176 ("requins").
Frassetto, F. 1915 A ("selaci").
Fürbringer, M. 1902 A (Selacha).
Gaupp, E. 1905 D, 868 ("haie").
1910 C.
Gegenbaur, C. 1870 B, 448 ("selachier").
Gill, T. 1905 A, 657.
Goeppert, E. 1897 A, 244 ("selachier").
Goette, A. 1901 A, 548 ("selachier").
Goodrich, E. S. 1909 A, 135.
1918 A, 12 ("selachians").
Gregory, W. K. 1928 A, 3, fig. 2 ("sharks").
Haller, G. 1923 A, 95 ("selachier").
1924 A, 305 ("selachier").
1926 A, 449 ("selachier").
Hase, A. 1913 A ("selachier").
Hasse and Schwarck 1870 A, 36 ("selachier").
Haswell, W. A. 1884 A.
Huxley, T. H. 1863 F, 426 ("sharks, rays").
1876 E, 103 ("plagiostomes").
1881 A, 453 ("sharks").
Imms, A. D. 1905 A, 43 (Selachoidei).
Jaekel, O. 1901 A, 558 ("selachier").
1911 A, 55.
1926 A, 174 ("selachier").
1926 B, 43 ("selachier").
Jordan and Gilbert 1882 A, 12.
Kehrer, F. A. 1896 A, 349 ("selachier").
Kingsley, J. S. 1894 A, 638 ("sharks").
Klaatsch, H. 1890 A, 98, 172, 214 ("selachier").
1893 B, 654 ("selachier").
1893 C, 175 ("selachier").
Kryzanovsky, S. 1916 A, 235.
Laaser, P. 1900 A, 479 ("selachier").
1903 A, 551 ("selachier").
Lakjer, T. 1927 A, 284 ("selachier").
Lavocat, A. 1885 A, 32 ("plagiostomes").
Lawley, R. 1875 B, 63 (Placoidei).
Leunis and Ludwig 1883 A, 782 (Plagiostomata).
Leydig, F. 1873 B, 31 ("selachier").
Lönnberg, E. 1901 A.
1902 A.
Lubosch, W. 1909 A, 1 ("selachier").
Luther, A. 1909 A ("selachier").
Matthes, E. 1921 A, 212 ("selachier").
Meek, A. 1916 A, 38 (Plagiostomi).
Mollier, S. 1895 B, 10 ("selachier").
Müller, E. 1909 A, 469 ("selachier").
Müller and Henle 1838 A, 33 ("sharks").
Mummery, J. H. 1917 A, 251 (Plagiostomi).
Nauck, E. T. 1926 B, 73 ("selachier").
Noordenbos, W. 1905 B, 389.
Norman, E. W. 1926 A, 438, 458 (Euselachii).
Parker, G. H. 1904 A, 496 ("fishes").
Parker, W. K. 1881 C, 71 ("selachians").
Parker and Haswell 1897 A, 156 (Euselachii).
Pouchet and Chabry 1884 A, 186 ("sélaciens").
Rabinerson, A. 1925 A, 434, 449 ("selachier").
Radcliffe, L. 1917 A, 26 ("sharks").
Reynolds, S. H. 1897 A, 31, 63, 108.
Ridewood, W. G. 1921 A ("sharks and rays").
Röse, C. 1892 G, 140 ("selachier").
1897 A, 58 ("haifische").
Sabatier, A. 1898 A, 928 ("sélaciens").
1903 B, 1219 ("sélaciens").
Schlosser, M. 1917 A, 142 ("selachier").
Schmalhausen, J. J. 1916 C, 213.
Schoenichen, W. 1900 A, 502 ("haie").
Schuchert, C. 1914 B, 277 ("sharks").
1915 A, 685.
Secerov, S. 1911 A, 1.
Sewertzoff, A. N. 1926 A, 535 ("selachians").
Sewertzoff and Disler 1924 A, 345 ("selachier").
Shann, E. W. 1919 A, 532.
Stannius, H. 1854 A (Plagiostomi).
Steinmann, G. 1907 A, 400.
Stephan, P. 1900 A, 233 ("sélaciens").
Stromer, E. 1905 H, 216 ("haie").
Ussow, S. 1900 A, 233 ("selachier").
Van Wijhe, J. W. 1922 A, 291 ("selachier").
Veit, O. 1916 A, 375 ("selachier").
Wagner, R. 1843 A, 204 (Plagiostomi).
Weidenreich, F. 1926 A, 45, 53 ("selachier").
Weiler, W. 1922 A, 103.
Wells, G. A. 1917 A, 417.
White, J. W. 1905 A, 319 ("selachier").
Woodward, A. S. 1922 C, 67.
1924 B, 338.
Ziegler, H. E. 1923 A, 62 ("selachier").
Zittel and Koken 1911 A, 48.
Zittel and Schlosser 1923 A, 54.
Zittel and Woodward 1902 A, 25 (Plagiostomi)

Suborder Squaliformes Goodrich.

Goodrich, E. S. 1909 A, viii, 151.
Unless otherwise indicated the authors, as quoted, use for this suborder the name Squali.
Hay, O. P. 1902 A, 275.
Abel, O. 1919 A, 118 (Plagiostomi).
Agassiz, L. 1844 D, 142 ("squalides").
1844 E, 332 ("sharks").
1854 A, 4 ("sharks").
Allis, E. P. 1918 B, 263 (Selachii).
1925 A, 76 (Selachii).
Ameghino, F. 1906 A, 463 ("squales").
Backman, G. 1915 A.
Bessels, E. 1869 A, 153 ("haie").
Beyer, H. 1907 A, 266 ("selachier").
Boas, J. E. V. 1914 B, 538 ("haie").
Bonaparte, C. L. 1831 A, 121 (Squalidæ).
1833 B, 1203 (Squalidæ).
1838 C, 198, 206 (Squalidæ).
1839 A, 4, 8 (Squalidæ).
1840 A, 45 (Squalidæ).
Braus, H. 1904 A, 411 ("haie").
1906 B, 558 ("haie").
Bridge, T. W. 1904 A, 442 (Selachii).
Brohl, E. 1909 A, 348 ("haie").
Cunningham, J. T. 1912 A, 246 (Selachii).
Cuvier, G. 1803 A, 166 ("squales").
1805 A.
1815 A, 123 ("squales").
Dana, J. D. 1863 B, 317 ("sharks").
Davidoff, M. 1879 A ("haie").
Dean, B. 1900 A, 22 (Selachoidei).
Deinse, A. B. 1916 A, 417 ("selachier").
Dohrn, A. 1884 A ("haie").
Dollo, L. 1889 F, 334.
1904 C, 47 ("sélaciens").
Duméril, A. 1856 A, 125.
Eimer, G. H. T. 1901 A, 61, 242 ("haie").
Fahrenholz, C. 1915 A, 394 ("haie").
Filatoff, D. 1907 A, 311 ("haie").
Fitzinger, L. J. 1873 A, 55 (Pleurochismata).
Forbes, H. O. 1879 A, 456 ("sharks").
Fürbringer, K. 1904 B, 464 ("squaliden").
Fürbringer, M. 1902 A ("haie").
1903 A, 361 (Selachii).
Garman, S. 1904 A, 246, 269 (Antacea).
1913 A, 10 (Antacea).
Gaupp, E. 1905 D, 834, 841 ("haie").
1910 C.
Gegenbaur, C. 1870 C, 405 ("haie").
1871 B ("haie").
Geoffrey, St. Hilaire 1807 C, 91 ("squales").
Gill, T. 1882 A, 967.
1885 A, lxiii.
Goetsch, W. 1920 A, 9 ("haie").
Greene, J. R. 1861 A, 227 (Squalidæ).
Haeckel, E. 1868 A, 443.
1873 A, 516, 585 (Squalacei).
Hatschek, B. 1893 A, 90 ("haie").
Huxley, T. H. 1869 G, 452.
Jaekel, O. 1913 A, 90 ("haie").
1913 C, 36 ("haie").
Jordan and Gilbert 1882 A, 12.
Kehrer, F. A. 1896 A, 347 ("haie").
Kingsley, J. S. 1885 A, 72.
Klaatsch, H. 1893 C, 181 (Squalidæ).
Küstlin, O. 1844 A ("haifische").
Latreille, P. A. 1825 A, 109 ("squalides").
Lavocat, A. 1885 A, 32 ("squales").
Leunis and Ludwig 1883 A, 782 (Selachoidei).
Lönnberg, E. 1902 A (Squalidæ).
Lubosch, W. 1909 A, 4 ("haie").
1911 B, 748 ("haie").
Lütken, C. 1868 C.
M'Donald, R. 1864 A, 166 ("sharks").
Meckel, J. F. 1825 A ("haifische").
Mivart, St. G. 1871 B, 380 ("sharks").
Müller, E. 1909 A, 473 (Acanthias).
Müller, J. 1841 B, cliii ("haie").
1845 A, 137 (Squalidæ).
Müller and Henle 1838 A, 34.
Norman, E. W. 1926 A, 452 (Pleurotremata).
Owen, R. 1839 G, 209 ("squales").
1846 E, 51 (Plagiostomi).
1848 B, 87 ("sharks").
1866 A, 13 (Selachii).
Parker and Haswell 1897 A, 156 (Squalida).
Pompeckj, J. F. 1913 A, 1124 (Selachoidei).
Priem, F. 1908 B ("squales").
Probst, J. 1886 B, 301 ("haie").
Rabl, C. 1901 A, 476 ("squaliden").
Rafinesque, C. S. 1815 A, 93 (Antacea).
Rauther, M. 1913 A, 1097 (Selachioidei).
Regan, C. T. 1906 A, 722 (Pleurotremata).
Ridewood, W. G. 1899 A, 46.
1921 A ("sharks").
Rosenberg, E. 1887 A, 31 ("selachier").
Ryder, J. 1886 A, 71.
Sabatier, A. 1898 A, 930 ("squales").
1903 B, 1219 ("squales").
Schauinsland, H. 1906 A, 393 ("squaliden").
Schlosser, M. 1898 D, 119 ("haie").
Schmalhausen, J. J. 1916 C, 207 ("sharks").
Seeley, H. G. 1872 B, 34 ("sharks").
Sewertzoff, A. N. 1896 A, 273 ("haie").
1897 A, 411, figs. 1-3 (Acanthias).
Shitkov, B. M. 1899 A, 256 ("haie").
Sloan, E. 1908 A, 335, 472 (Squalidæ).
Smith, H. M. 1916 A, 34 ("sharks").
Steinhard, O. 1903 A, 4 ("squaliden").
Steinmann, G. 1907 A, 400 (Squaloidei).
1908 A, 205 ("haie").
Steenstrup, J. 1861 A, 368 ("requins").
Stephan, P. 1900 A, 310 ("squales").
Stromer, E. 1905 C, 164 (Squaloidei).
1912 A, 19 (Squaloidei).
Terra, P. 1911 A, 199 (Squalides).
Veit, O. 1916 A, 369 ("haie").
1924 A, 379 ("haifische").
Wagner, R. 1843 A ("haifische").
Waldheim, F. 1835 A, 234 ("requins").
Weber, E. 1821 A, 1060.
Wells, G. A. 1917 A, 417 (Acanthias).
Wilbrand, J. B. 1824 A, 983 ("haye").
Williamson, W. C. 1851 A, 669 ("sharks").
Woodward, A. S. 1898 B, 40 (Selachoidei).
1921 B, 37 (Selachii).
1922 C, 68.

Superfamily PETALODONTOIDÆ new form.

Hay, O. P. 1902 A, 275.
Jordan, D. S. 1923 A, 92 (Janassides).
Woodward, A. S. 1921 B, 34 (Bradydonti).

PETALODONTIDÆ Newberry and Worthen.

Hay, O. P. 1902 A, 275.
Abel, O. 1919 A, 135.
Arldt, T. 1907 D, 672.
1923 A, 487.
Bridge, T. W. 1904 A, 446.
Brongniart, C. 1888 C, 46 ("pétalodontidés").
Cope, E. D. 1891 N, 16.
Dean, B. 1906 B, 136 ("petalodontids").
Dollo, L. 1889 F, 340.
Eastman, C. R. 1903 B, 170.
1917 A, 256.
Fuchs, T. 1900 A, 7 ("petalodonten").
Goodrich, E. S. 1909 A, 167.
Gregory, W. K. 1907 D, 446.
Hay, O. P. 1901 B, 66-69.
Jaekel, O. 1901 A, 557 ("petalodonten").
Jordan, D. S. 1905 A, i, 554; ii, 585.
1907 B, 211, 759.
1923 A, 93 (Janassidæ).
Pompeckj, J. F. 1913 A, 1129.
Sauvage, H. E. 1901 E, 70 ("petalodontides").
Schlosser, M. 1917 A, 133, 134, 147 ("petalodontiden").
Stromer, E. 1912 A, 22.
Trouessart, E. L. 1906 A, 213 ("petalodontes").
Woodward, A. S. 1919 B, 380 ("petalodonts").
1922 C, 66.
1924 A, 109.
Zittel and Koken 1911 A, 61.
Zittel and Schlosser 1923 A, 67 (Petalodontidæ).
Zittel and Woodward 1902 A, 37.

JANASSA Münster. Type *Trilobites bituminosus* Schlotheim = *J. angulata* Münster.

Hay, O. P. 1902 A, 275.
Abel, O. 1919 A, 137, fig. 101.
Agassiz, L. 1844 C, 267.
Barkas, W. J. 1874 D, 548.
Bronn, H. G. 1848 A, 604 (Ianassa).
1849 A, 647 (Ianassa).
Case, E. C. 1908 C, 576 (Janassa, Strigilina).
1915 A, 124.
1926 B, 196.
Dean, B. 1906 B, 136.
Eastman, C. R. 1900 F, 581.
1903 B, 170.
1917 A, 256.
Hay, O. P. 1901 B, 66, 69 (Janassa, Climaxodus).
Hussakof, L. 1911 A, 156.
Jaekel, O. 1909 D, 717 (Janassidæ).
1911 A, 56, fig. 52.
Jordan, D. S. 1905 A, i, 554.
1907 B, 211.
1919 B, 176.
1923 A, 93.
Pompeckj, J. F. 1913 A, 1129, fig. 33.
Sauvage, H. E. 1901 E, 71.
Schlosser, M. 1917 A, 134.
Woodward, A. S. 1919 B, 380.
1920 B, 1, 5.
1921 B, 34, fig. 3.
1922 C, 67, fig. 64.
1924 A, 110.
Zittel and Koken 1911 A, 62, fig. 109.
Zittel and Schlosser 1923 A, 68, figs. 110, 111.
Zittel and Woodward 1902 A, 38.

Janassa angularis Branson.

Branson, E. B. 1916 A, 647, pl. ii, figs. 5, 6.
Pennsylvanian (Embar); Wyoming.

Janassa brevis (Newb.).

Hay, O. P. 1902 A, 276.
Pennsylvanian (Coal-measures); Ohio.

Janassa gurleiana Cope.

Hay, O. P. 1902 A, 276.
Case, E. C. 1900 A, 700; pl. i, fig. 2 (J. gurleyana).
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 12.
Hussakof, L. 1911 A, 156; pl. xxvi, fig. 2 (J. gurleyana).
Pennsylvanian (Coal-measures); Illinois.

Janassa maxima Eastman.

Eastman, C. R. 1903 B, 172; pl. ii, fig. 21; pl. iii, fig. 24; text-fig. 5.
Pennsylvanian (Atchison); Nebraska.

Janassa ordiana Cope.

Hay, O. P. 1902 A, 276.
Beede, J. W. 1907 A, 120.
Permain; Texas.

Janassa strigilina Cope.

Hay, O. P. 1902 A, 276.
Case, E. C. 1900 A, 699; pl. i, fig. 1.
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 11.
Hussakof, L. 1911 A, 156; pl. xxvi, fig. 1.
Pennsylvanian (Upper); Illinois.

Janassa unguicula Eastman.

Eastman, C. R. 1903 B, 173; pl. ii, fig. 13; text-fig. 6.
Branson, E. B. 1916 A, 646; pl. ii, figs. 7-18.
Woodruff, E. G. 1906 A, 290; pl. xviii, fig. 8.
Pennsylvanian; Nebraska, Illinois, Wyoming.

Janassa unguiformis (Newb. and Worth.).

Hay, O. P. 1902 A, 276 (Peltodus).
Branson, E. B. 1916 A, 645; pl. ii, figs. 7, 7*a*.
Pennsylvanian; Illinois, Wyoming.

CLIMAXODUS M'Coy. Type *C. imbricatus* M'Coy.

M'Coy, F. 1848 A, 128.
Hay, O. P. 1902 A, 275 (Janassa, in part).
Barkas, W. J. 1869 A, 42.
Hay, O. P. 1901 B.
Jordan, D. S. 1919 B, 239.
1923 A, 93.
Woodward, A. S. 1919 B, 379.
1920 B, 1, 5.
Woodward, A. S. 1921 B, 34.
1922 C, 67
1924 A, 109.
Zittel and Schlosser 1923 A, 68.

This genus is recognized by A. S. Woodward (as cited) as being distinct from *Janassa*. Some of the American species referred to *Janassa* may belong to *Climaxodus*.

PELTODUS Newb. and Worth. Type *P. unguiformis* Newb. and Worth.

Hay, O. P. 1902 A, 276.
Barkas, W. J. 1874 D, 547.
Davis, J. W. 1884 A, 634.
Eastman, C. R. 1903 B, 174.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 359 (Syn. of Janassa).
1923 A, 93.
Woodward, A. S. 1920 B, 4.

Peltodus? plicomphalus St. John and Worth.

Hay, O. P. 1902 A, 276.
Mississippian (Chester); Illinois.

Peltodus pulvinulus Newb. and Worth.

Hay, O. P. 1902 A, 276.
Mississippian; Illinois.

Peltodus quadratus St. John and Worth.

Hay, O. P. 1902 A, 276.
Mississippian (St. Louis); Illinois, Missouri.

Peltodus transversus St. John and Worth.

Hay, O. P. 1902 A, 276.
Pennsylvanian; Illinois.

TANAODUS St. John and Worth. Type *T. bellicinctus* St. John and Worth.

Hay, O. P. 1902 A, 276.
Eastman, C. R. 1903 B, 174.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 380.
1923 A, 93.
Woodward, A. S. 1920 B, 4.

Tanaodus angularis (Newb. and Worth.).

Hay, O. P. 1902 A, 276.
Meek, F. B. 1869 A, 3 (Deltodus angulatus This species?).
Pennsylvanian; Illinois.

Tanaodus bellicinctus St. John and Worth.

Hay, O. P. 1902 A, 276.
Mississippian (Chester); Illinois.

Tanaodus depressus St. John and Worth.

Hay, O. P. 1902 A, 276.
Mississippian (Chester); Illinois.

Tanaodus gracillimus (Newb. and Worth.).

Hay, O. P. 1902 A, 276.
Mississippian (Burlington); Iowa.

Tanaodus grossiplicatus St. John and Worth.

Hay, O. P. 1902 A, 276.
Mississippian (Chester); Illinois.

Tanaodus multiplicatus (Newb. and Worth.).

Hay, O. P. 1902 A, 277.
Brongniart, C. 1888 C, 47 (Tanoodus).
Mississippian (Burlington); Iowa.

Tanaodus obscurus (Leidy).

Hay, O. P. 1902 A, 277.
Mississippian (Keokuk); Illinois.

Tanaodus polymorphus St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (Chester); Illinois.

Tanaodus prænuntius St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (St. Louis); Illinois, Iowa, Missouri.

Tanaodus pumilis St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (St. Louis); Illinois, Iowa.

Tanaodus sculptus St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (St. Louis); Iowa, Illinois, Missouri.

Tanaodus sublunatus St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (St. Louis); Illinois.

CYMATODUS Newb. and Worth. Type *C. oblongus*, Newb. and Worth.

Hay, O. P. 1902 A, 277.
Barkas, W. J. 1874 D, 546.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 359 (Syn.? of Janassa).
1923 A, 93.

Cymatodus oblongus Newb. and Worth.

Hay, O. P. 1902 A, 277.
Pennsylvanian; Illinois.

THORACODUS Cope. Type *T. emydinus* Cope.

Hay, O. P. 1902 A, 277.
Hay, O. P. 1901 B, 66, 69.
Jordan, D. S. 1923 A, 93.

Thoracodus emydinus Cope.

Hay, O. P. 1902 A, 277.
Case, E. C. 1900 A, 702.
Permian; Illinois.

FISSODUS St. John and Worth. Type *F. bifidus* St. John and Worth.

Hay, O. P. 1902 A, 277 (Fissodus, Cholodus).
Branson, E. B. 1916 A, 647.
Eastman, C. R. 1903 B, 174.
Etheridge, R. 1877 A, 306; pl. xiii, figs. 2, 3.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 320.
1923 A, 93.
Zittel and Koken 1911 A, 62.
Zittel and Schlosser 1923 A, 68.
Zittel and Woodward 1902 A, 39.

Fissodus bifidus St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (Chester); Illinois.

Fissodus dentatus Eastman.

Eastman, C. R. 1903 B, 175; pl. ii, fig. 12.
Pennsylvanian (Missourian); Kansas.

Fissodus inæqualis (St. John and Worth.).

Hay, O. P. 1902 A, 277 (Cholodus).
Branson, E. B. 1916 A, 647.
Eastman, C. R. 1903 B, 174; pl. ii, fig. 11; pl. iii, fig. 26.
Woodruff, E. G. 1906 A, 290; pl. xviii, fig. 6.
Pennsylvanian (Missourian); Nebraska, Kansas, Iowa, Illinois, Missouri, Wyoming.

Fissodus tricuspidatus St. John and Worth.

Hay, O. P. 1902 A, 277.
Mississippian (Chester); Illinois.

PETALORHYNCHUS Agassiz. Type *Petalodus psittacinus* M'Coy.

Agassiz, L. 1862, in Morris and Roberts, Quart Jour. Geol., xviii, 101.
Hay, O. P. 1902 A, 278.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 547.
Eastman, C. R. 1903 B, 171.
Etheridge, R. 1875 A, 242; pl. viii, figs. 3, 4
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 93.
Woodward, A. S. 1924 A, 109.
Zittel and Koken 1911 A, 61.
Zittel and Schlosser 1923 A, 68.
Zittel and Woodward 1902 A, 38.

Petalorhynchus distortus St. John and Worth.

Hay, O. P. 1902 A, 278.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Petalorhynchus pseudosagittatus St. John and Worth.

Hay, O. P. 1902 A, 278.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Petalorhynchus spatulatus St. John and Worth.

Hay, O. P. 1902 A, 278.
Mississippian (St. Louis); Illinois, Iowa.

Petalorhynchus striatus Newb. and Worth.

Hay, O. P. 1902 A, 278.
Mississippian (Burlington); Illinois.

PETALODUS Owen. Type *P. hastingsiæ* Agassiz.

Owen, R. 1845 B (1840), 61.
Hay, O. P. 1902 A, 278.
Agassiz, L. 1844 C, 267.
1844 D, 142.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 547.
Bronn, H. G. 1848 B, 949.
1849 A, 646.
Eastman, C. R. 1903 B, 171, 175.
1917 A, 257.
Etheridge, R. 1875 A, 244, pl. viii, figs. 5, 6.
Hay, O. P. 1901 B, 66.
Hayden, F. V. 1872 A, 132.
Heilprin, A. 1887 A, 300.
Jaekel, O. 1900 A, 146.
Jordan, D. S. 1905 A, i, 554.
1907 B, 211.
Jordan, D. S. 1919 B, 207.
1923 A, 93 (Syn.? of Ctenoptychius).
M'Coy, F. 1849 A, 141.
Owen, R. 1845 B, 61, 62, pl. xxii, figs. 3-5.
1849 D, 42.
1866 A, 371.
Sauvage, H. E. 1901 E, 71.
Woodward, A. S. 1924 A, 109.
Zittel and Koken 1911 A, 61.
Zittel and Schlosser 1923 A, 67.
Zittel and Woodward 1902 A, 38.

Petalodus arcuatus St. John.

Hay, O. P. 1902 A, 280 (Chomatodus).
Eastman, C. R. 1903 B, 177.
Hayden, F. V. 1872 A, 127.

Meek, F. B. 1869 A, 3 (Chomatodus; name only).
1872 A, 100, 102, 127 (Chomatodus).
St. John and Worthen 1875 A, pl. x, figs. 23*a*-23*d* (Chomatodus).
Pennsylvanian; Iowa: (Missourian); Nebraska.

Petalodus curtus Newb. and Worth.
Hay, O. P. 1902 A, 278.
Mississippian (Keokuk); Illinois, Iowa.

Petalodus hybridus St. John and Worth.
Hay, O. P. 1902 A, 278.
Mississippian (St. Louis); Illinois.

Petalodus knappi Newb.
Hay, O. P. 1902 A, 278.
Mississippian (Keokuk); Indiana.

Petalodus linguifer Newb. and Worth.
Hay, O. P. 1902 A, 278.
Branson, E. B. 1906 A, 1379, pl. xli, figs. 13-15.
Mississippian (Chester); Illinois, Missouri: (Salem); Indiana.

Petalodus ohioensis Safford.
Hay, O. P. 1902 A, 278.
Eastman, C. R. 1903 B, 176; pl. ii, figs. 17, 18; pl. iii, fig. 27 (P. alleghaniensis).
Hayden, F. V. 1872 A, 127 (P. destructor).
Hussakof and Bryant 1919 A, 149.
Mason, S. C. 1883 A, 13 (P. alleghaniensis).
Meek, F. B. 1869 A, 3 (P. destructor).
1872 A, 96, 127 (P. destructor).
Newberry, J. S. 1861 A, 38 (P. alleghaniensis).
1874 G, 156 (P. alleghaniensis).
Woodruff, E. G. 1906 A, 288, pl. xviii, fig. 4 (P. alleghaniensis).
Worthen, A. H. 1866 A, 61 (P. destructor).
Zittel and Koken 1911 A, 61, fig. 105 (P. destructor).
Zittel and Schlosser 1923 A, 67, fig. 109 (P. destructor).
Zittel and Woodward 1902 A, 38, fig. 75 (P. alleghaniensis).
Pennsylvanian; Ohio, Illinois, Iowa, Nebraska, Arkansas, Pennsylvania; Permo-Carboniferous; Nebraska.

Petalodus proximus St. John and Worth.
Hay, O. P. 1902 A, 279.
Pennsylvanian; Illinois.

Petalodus sp. indet.
Stevenson, J. J. 1907 A, 168.
Pennsylvanian (Ames); West Virginia.

ANTLIODUS Newb. and Worth. Type *A. mucronatus* Newb. and Worth.

Hay, O. P. 1902 A, 279.
Barkas, W. J. 1874 D, 544.
Hay, O. P. 1901 B, 66.
Hayden, F. V. 1872 A, 132.
Jordan, D. S. 1919 B, 342 (Syn. of Petalodus).
(Type said to be *A. parvulus*).
1923 A, 93.

Antliodus arcuatus Newb.
Hay, O. P. 1902 A, 279.
Branson, E. B. 1906 A, 1394.
Hussakof, L. 1908 A, 28.
Mississippian (Salem); Indiana.

Antliodus cucullus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Keokuk); Illinois.

Antliodus gracilis St. John and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Warsaw); Illinois.

Antliodus minutus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Branson, E. B. 1906 A, 1394.
Brongniart, C. 1888 C, 47.
Mississippian (Salem); Indiana.

Antliodus mucronatus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (St. Louis); Illinois.

Antliodus parvulus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Burlington); Illinois.

Antliodus perovalis St. John and Worth.
Hay, O. P. 1902 A, 279.
Mississipian (Warsaw); Illinois.

Antliodus politus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Keokuk); Illinois.

Antliodus robustus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Chester); Illinois.

Antliodus sarcululus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Newberry and Worthen 1870 A, pl. ii, figs. 8-8b.
Mississippian (Burlington); Iowa.

Antliodus similis Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Keokuk); Illinois, Indiana.

Antliodus simplex Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Burlington); Iowa.

Antliodus sulcatus Newb. and Worth.
Hay, O. P. 1902 A, 279.
Mississippian (Keokuk); Illinois.

CHOMATODUS Agassiz. Type *C. cinctus* Agassiz.

Hay, O. P. 1902 A, 279.
Agassiz, L. 1844 C, 267.
Barkas, W. J. 1874 D, 545.
Brongniart, C. 1888 C, 46 (Chromotodus).
Coulon, L. 1903 A, 130.
Eastman, C. R. 1903 B, 203.

Eastman, C. R. 1909 A, 488.
1917 A, 257.
Giebel, C. G. 1855 A, 115.
Hay, O. P. 1901 B, 66.
Hayden, F. V. 1872 A, 132.
Heilprin, A. 1887 A, 300.
Jordan, D. S. 1919 B, 190.
1923 A, 94.
Savage, T. E. 1902 A, 257.
Woodward, A. S. 1920 B, 4.

Chomatodus affinis Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Keokuk); Illinois.

Chomatodus angustus Newb.
Hay, O. P. 1902 A, 280.
Branson, E. B. 1906 A, 1394.
Mississippian (Salem); Indiana.

Chomatodus comptus St. John and Worth.
Hay, O. P. 1902 A, 280.
Eastman, C. R. 1903 B, 203.
Mississippian (Burlington); Iowa.

Chomatodus costatus Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Keokuk); Illinois.

Chomatodus cultellus Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Chester); Illinois.

Chomatodus elegans Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Keokuk); Iowa.

Chomatodus inconstans St. John and Worth.
Hay, O. P. 1902 A, 280 (C. chesterensis, C. inconstans, C. varsouviensis).
Branson E. B. 1906 A, 1380, pl. xli, figs. 29-31.
Eastman, C. R. 1903 B, 204, pl. iv, figs. 32-34 (C. chesterensis, C. varsouviensis are syns.).
Mississippian (St. Louis, Keokuk, Chester); Iowa, Illinois: (Salem); Indiana, Missouri.

Chomatodus incrassatus St. John and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (St. Louis); Illinois, Iowa, Missouri.

Chomatodus insignis (Leidy).
Hay, O. P. 1902 A, 280.
Mississippian (St. Louis); Missouri, Illinois.

Chomatodus lanesvillensis Branson.
Branson, E. B. 1906 A, 1381, pl. xlii, figs. 15-18.
Mississippian (Salem); Indiana.

Chomatodus loriformis Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Keokuk); Illinois.

Chomatodus molaris Newb. and Worth.
Hay, O. P. 1902 A, 280.
Mississippian (Keokuk); Illinois.

Chomatodus newberryi Hay.
Hay, O. P. 1902 A, 280.
Branson, E. B. 1906 A, 1394 (C. obliquus).
Mississippian (Salem); Indiana.

Chomatodus parallelus St. John and Worth.
Hay, O. P. 1902 A, 280.
Branson, E. B. 1906 A, 1379.
Mississippian (Warsaw); Illinois, Missouri: (Salem); Indiana.

Chomatodus pusillus Newb. and Worth.
Hay, O. P. 1902 A, 280.
Branson, E. B. 1906 A, 1394.
Mississippian (Keokuk); Illinois: (Salem); Indiana.

Chomatodus selliformis Newb.
Hay, O. P. 1902 A, 280.
Branson, E. B. 1906 A, 1394.
Mississippian (St. Louis); Illinois: (Salem); Indiana.

LISGODUS St. John and Worth. Type *L. curtus* St. John and Worth.

Hay, O. P. 1902 A, 281.
1901 B, 66.
Jordan, D. S. 1919 B, 380 (Syn.? of Petalodus).
1923 A, 93.

Lisgodus affinis Newb.
Hay, O. P. 1902 A, 281.
Branson, E. B. 1906 A, 1394.
Mississippian (St. Louis); Illinois, Missouri: (Salem); Indiana.

Lisgodus curtus St. John and Worth.
Hay, O. P. 1902 A, 281.
Mississippian (Burlington); Iowa, Illinois (Keokuk); Illinois, Missouri.

Lisgodus selluliformis St. John and Worth.
Hay, O. P. 1902 A, 281.
Mississippian (St. Louis); Illinois, Missouri.

Lisgodus serratus St. John and Worth.
Hay, O. P. 1902 A, 281.
Mississippian (Burlington); Iowa, Illinois.

CALOPODUS St. John and Worth. Type *C. apicalis* St. John and Worth.

Hay, O. P. 1902 A, 281.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 93.

Calopodus apicalis St. John and Worth.
Hay, O. P. 1902 A, 281.
Pennsylvanian; Iowa.

CTENOPTYCHIUS Agassiz. Type *C. apicalis* Agassiz.

Hay, O. P. 1902 A, 281 (Ctenoptychius, Ctenopetalus); 282 (Harpacodus).
Agassiz, L. 1844 C, 267, 268.
1862, in Morris and Roberts, Quart. Jour. Geol., xviii, 100 (Ctenopetalus).
Arldt, T. 1923 A, 487 (Ctenoptychius, Ctenopetalus, Harpacodus).
Barkas, T. P. 1869 B, 43, figs. 1, 2.
1874 D, 545 (Ctenoptychius, Ctenopetalus); 546 (Harpacodus).
Bronn, H. G. 1848 A, 356.
1849 A, 646.
Eastman, C. R. 1903 B, 171, 176.
1917 A, 257.
Etheridge, R. 1875 A, 244.
Giebel, C. G. 1855 A, 115, pl. xlviii.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1907 B, 212.
1919 B, 320 (Ctenopetalus; syn. of Ctenoptychius).
1923 A, 93.
Woodward, A. S. 1924 A, 109.
Zittel and Koken 1911 A, 63.
Zittel and Schlosser 1923 A, 69.
Zittel and Woodward 1902 A, 39.

Ctenoptychius acuminatus (St. John and Worth.).

Hay, O. P. 1902 A, 282.
Mississippian (Kinderhook); Iowa.

Ctenoptychius bellulus (St. John and Worth.).

Hay, O. P. 1902 A, 281 (Ctenopetalus).
Mississippian (St. Louis); Iowa, Illinois.

Ctenoptychius compactus (St. John and Worth.).

Hay, O. P. 1902 A, 282 (Harpacodus compactus, H. occidentalis).
Eastman, C. R. 1903 B, 178 (H. occidentalis a syn.).
Mississippian (Chester); Illinois.

Ctenoptychius cristatus Dawson.

Hay, O. P. 1902 A, 282.
Bell, W. A. 1913 A, 340, 343.
Lambe, L. M. 1904 C, 19, 35, 41.
Whiteaves, J. F. 1903 B, 29 (This species?).
Carboniferous; Nova Scotia.

Ctenoptychius limatulus (St. John and Worth.).

Hay, O. P. 1902 A, 281 (Ctenopetalus).
Mississippian (Chester); Illinois.

Ctenoptychius medius (St. John and Worth.).

Hay, O. P. 1902 A, 281 (Ctenopetalus).
Mississippian (Chester); Illinois.

Ctenoptychius occidentalis (St. John and Worth.).

Hay, O. P. 1902 A, 281 (Ctenopetalus).
Eastman, C. R. 1903 B, 178, pl. ii, fig. 10.
Pennsylvanian; Iowa: (Missourian); Nebraska.

Ctenoptychius pertenuis St. John and Worth.

Hay, O. P. 1902 A, 282.
Mississippian (Chester); Illinois.

Ctenoptychius stevensoni St. John and Worth.

Hay, O. P. 1902 A, 282.
Newberry, J. S. 1874 G, 156 (Peripristis n. sp.).
Pennsylvanian; West Virginia.

Ctenoptychius vinosus (St. John and Worth.).

Hay, O. P. 1902 A, 281 (Ctenopetalus).
Mississippian (Keokuk); Iowa.

POLYRHIZODUS M'Coy. Type *P. magnus* M'Coy.

Hay, O. P. 1902 A, 282.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 546, 548 (Dactylodus, Polyrhizodus).
Cushing, H. P. 1912 A, 581.
Eastman, C. R. 1917 A, 257.
Goodrich, E. S. 1909 A, 167, fig. 133.
Hay, O. P. 1901 B, 66.
Hoernes, R. 1886 A, 543.
Jaekel, O. 1911 A, 57, fig. 53.
Jordan, D. S. 1907 B, 212.
1919 B, 239.
1923 A, 93.
Pompeckj, J. F. 1913 A, 1129.
Sauvage, H. E. 1901 E, 71.
Zittel and Koken 1911 A, 62.
Zittel and Schlosser 1923 A, 68.
Zittel and Woodward 1902 A, 39.

Polyrhizodus amplus St. John and Worth.

Hay, O. P. 1902 A, 282.
Mississippian (St. Louis); Illinois, Missouri.

Polyrhizodus carbonarius St. John and Worth.

Hay, O. P. 1902 A, 282.
Pennsylvanian; Illinois.

Polyrhizodus concavus (St. John and Worth.).

Hay, O. P. 1902 A, 282.
Eastman, C. R. 1917 A, 257, pl. viii, fig. 4.
Mississippian (St. Louis); Illinois.

Polyrhizodus dentatus Newb. and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Chester); Illinois.

Polyrhizodus digitatus (Leidy).

Hay, O. P. 1902 A, 283.
Mississippian (St. Louis); Missouri, Illinois.

Polyrhizodus excavatus (St. John and Worth.).

St. John and Worthen 1875 A, 392, pl. xiii, fig. 16 (Dactylodus).
Mississippian (Chester); Illinois.

Polyrhizodus grandis Eastman.

Eastman, C. R. 1917 A, 257, pl. viii, figs. 1, 2.
Mississippian (St. Louis); Illinois.

Polyrhizodus inflexus (Newb. and Worth.).

Hay, O. P. 1902 A, 283.
Mississippian (Chester); Illinois.

Polyrhizodus latus (Newb.).

Hay, O. P. 1902 A, 283.
Mississippian (St. Louis); Illinois.

Polyrhizodus littoni Newb. and Worth.

Hay, O. P. 1902 A, 283.
Branson, E. B. 1906 A, 1394.
Hussakof, L. 1908 A, 34.
Mississippian (St. Louis); Missouri, Indiana.

Polyrhizodus minimus (St. John and Worth.).

Hay, O. P. 1902 A, 283.
Mississippian (St. Louis); Illinois.

Polyrhizodus modestus Newb.

Hay, O. P. 1902 A, 283.
Claypole, E. W. 1903 A, 319, 321.
Eastman, C. R. 1907 B, 18.
Newberry, J. S. 1874 G, 94, 98.
Upper Devonian or Lower Mississippian; Ohio.

Polyrhizodus nanus St. John and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Keokuk); Iowa.

Polyrhizodus piasaënsis St. John and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Warsaw); Illinois.

Polyrhizodus ponticulus Newb. and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Chester); Illinois.

Polyrhizodus porosus Newb. and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Burlington); Iowa, Illinois.

Polyrhizodus princeps (Newb. and Worth.).

Hay, O. P. 1902 A, 283.
Eastman, C. R. 1917 A, 257.
Hussakof, L. 1908 A, 34.
Mississippian (St. Louis); Missouri, Illinois.

Polyrhizodus rectus (Newb.).

Hay, O. P. 1902 A, 283.
Hussakof, L. 1908 A, 34.
Mississippian (St. Louis); Illinois.

Polyrhizodus truncatus Newb. and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Burlington); Illinois.

Polyrhizodus williamsi St. John and Worth.

Hay, O. P. 1902 A, 283.
Mississippian (Keokuk); Missouri, Iowa.

PERIPRISTIDÆ Eastman.

Eastman, C. R. 1902 A, 389.
Jordan, D. S. 1923 A, 94.
Zittel and Koken 1911 A, 63.

PERIPRISTIS St. John. Type *Ctenoptychius semicircularis* Newb. and Worth.

Hay, O. P. 1902 A, 281 (*Ctenoptychius*, in part).
Barkas, W. J. 1874 D, 547.
Eastman, C. R. 1902 A, 388, 389.
1903 B, 176, 178.
Jordan, D. S. 1919 B, 359 (Syn. of Ctenoptychius).
1923 A, 94 (Not syn. of Ctenoptychius).
Zittel and Woodward 1902 A, 39.

Peripristis semicircularis (Newb. and Worth.).

Hay, O. P. 1902 A, 282 (Ctenoptychius).
Eastman, C. R. 1902 A, 289, fig. 1.
Eastman, C. R. 1903 B, 178, pl. ii, figs. 5-7; pl. iii, fig. 25, text-figs. 7, 8.
Etheridge, R. 1875 A, 244 (Ctenoptychius).
Hayden, F. V. 1872 A, 127.
Martin, H. T. 1913 A, 185 (Ctenoptychius).
Meek, F. B. 1869 A, 3.
1872 A, 86, 89, 96, 100, 102, 127.
Merrill, G. P. 1907 A, 15.
Smith, G. L. 1915 A, 282.
Stevenson, J. J. 1878 A, 240 (Ctenoptychius).
Woodruff, E. G. 1906 A, 290, pl. lxviii, fig. 7.
Missourian (Atchison); Nebraska: Pennsylvanian; Ohio, Indiana: Mississippian (Chester); Kentucky: Permian; Kansas; Iowa.

PSAMMODONTIDÆ Koninck

Hay, O. P. 1902 A, 284.
Abel, O. 1919 A, 135.
Arldt, T. 1907 D. 677.
Bridge, T. W. 1904 A, 446.
Cope, E. D. 1891 N, 17.
Dollo, L. 1889 F, 341.
Goodrich, E. S. 1909 A, 167.
Gregory, W. K. 1907 D, 446.
Hay, O. P. 1901 B, 66.
Hoernes, R. 1886 A, 543 (Psammodontes).
Jordan, D. S. 1905 A, i, 558.
Jordan, D. S. 1907 B, 215, 758, 759.
1923 A, 93.
Pompeckj, J. F. 1913 A, 1128.
Schlosser, M. 1917 A, 133 ("psammotontiden").
Trouessart, E. L. 1906 A, 213 ("psammodontes").
Woodward, A. S. 1919 B, 380.
1921 B, 34.
Zittel and Koken 1911 A, 61.
Zittel and Schlosser 1923 A, 66.
Zittel and Woodward 1902 A, 37.

PSAMMODUS Agassiz. Type *P. rugosus* Agassiz.

Hay, O. P. 1902 A, 284.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 548.
Böklen, H. 1887 A, 76.
Briquel, P. 1898 A, 16.
Bronn, H. G. 1848 B, 1048.
1849 A, 647.
Dean, B. 1909 C, 249.
Eastman, C. R. 1903 B, 170.
1917 A, 258.
Egerton, P. G. 1853 C, 282.
Etheridge, R. 1877 A, 308, pl. xiii, figs. 7-9.
Giebel, C. G. 1855 A, 115.
Hay, O. P. 1901 B, 66.
Heilprin, A. 1887 A, 300.
Hoernes, R. 1886 A, 543.
Jaekel, O. 1911 A, 54, fig. 44.
Jordan, D. S. 1905 A, i, 558; ii, 588.
1907 B, 215, 216.
1923 A, 93.
Mantell, G. A. 1844 A, 617.
Stephan, P. 1900 A, 409.
Woodward, A. S. 1921 B, 34.
1924 A, 110.
Zittel and Koken 1911 A, 61.
Zittel and Woodward 1902 A, 37.

Psammodus angularis Newb. and Worth.

Hay, O. P. 1902 A, 284.
Brongniart, C. 1888 C, 47 (P. porosus).
Hussakof and Bryant 1919 A, 149.
Mississippian (Chester); Illinois.

Psammodus antiquus Newb.

Hay, O. P. 1902 A, 284.
Claypole, E. W. 1903 A, 318.
Eastman, C. R. 1908 A, 276 (This genus?).
1907 B, 13 (This genus?).
Stauffer, C. R. 1909 A, 170.
Middle Devonian (Columbus); Ohio.

Psammodus cælatus St. John and Worth.

Hay, O. P. 1902 A, 284.
Mississippian (St. Louis); Iowa, Missouri.

Psammodus crassidens St. John and Worth.

Hay, O. P. 1902 A, 284.
Mississippian (St. Louis); Illinois, Iowa.

Psammodus glyptus St. John and Worth.

Hay, O. P. 1902 A, 284.
Branson, E. B. 1906 A, 1394.
Eastman, C. R. 1917 A, 258.
Hussakof, L. 1908 A, 34 (This species?).
Van Tuyl, F. M. 1925 A, 141.
Mississippian (Burlington); Illinois: (St. Louis); Indiana.

Psammodus grandis St. John and Worth.

Hay, O. P. 1902 A, 284.
Mississippian (Keokuk); Iowa.

Psammodus lovianus St. John and Worth.

Hay, O. P. 1902 A, 284.
Mississippian (Burlington); Iowa, Illinois.

Psammodus plenus St. John and Worth.

Hay, O. P. 1902 A, 284.
Eastman, C. R. 1917 A, 258, pl. vii, fig. 8.
Newberry, J. S. 1889 A, 210, pl. xix, figs. 7, 8 (P. glyptus *errore*).
Mississippian (St. Louis); Missouri, Illinois, Michigan.

Psammodus reticulatus Newb. and Worth.

Hay, O. P. 1902 A, 284.
Mississippian (Chester); Illinois.

Psammodus springeri St. John and Worth.

Hay, O. P. 1902 A, 285.
Eastman, C. R. 1917 A, 258.
Mississippian (Burlington); Iowa, Illinois.

Psammodus tumidus St. John and Worth.

Hay, O. P. 1902 A, 285.
Mississippian (Burlington); Iowa, Illinois.

Psammodus turgidus St. John and Worth.

Hay, O. P. 1902 A, 285.
Mississippian (Burlington-Keokuk division beds); Iowa.

Psammodus sp. indet.

Hay, O. P. 1902 A, 285.
Bell, W. A. 1913 A, 343 (Rhizodus).
Pennsylvanian (Joggins); Nova Scotia.
Lambe, L. M. 1904 C, 41.
Pennsylvanian (Joggins); Nova Scotia.

MAZODUS Newb. Type *M. kepleri* Newb.

Hay, O. P. 1902 A, 285.
Eastman, C. R. 1903 B, 219.
Moodie, R. L. 1920 C, 48, pl. i, fig. C.
1926 A, 67.
Rogers, A. F. 1924 A, 554, pl. xxvii, fig. 2.

Mazodus kepleri Newb.
Hay, O. P. 1902 A, 285.
Hussakof, L. 1908 A, 31.
Moodie, R. L. 1926 A, 79, 81, 93, pl. ix.
Mississippian (Waverly); Ohio.

ARCHÆOBATIS Newb. Type *A. gigas* Newb.

Hay, O. P. 1902 A, 285.
Dean, B. 1909 C, 258, pl. xxxv.
Eastman, C. R. 1903 B, 170.
Hay, O. P. 1901 B, 66.
Zittel and Koken 1911 A, 61.
Zittel and Woodward 1902 A, 37.

Archæobatis gigas Newb.
Hay, O. P. 1902 A, 285.
Branson, E. B. 1906 A, 1394.
Dean, B. 1909 C, 258.
Eastman, C. R. 1917 A, 258 (To Psammodus?).
Hussakof, L. 1908 A. 29.
Jordan, D. S. 1905 A, i, 559.
1907 B, 216.
Pompeckj, J. F. 1913 A, 1128.
Mississippian (St. Louis); Indiana.

COPODONTIDÆ Woodward.

Woodward, A. S. 1921 B, 35.

COPODUS Agassiz. Type *Psammodus cornutus* Agassiz.

Agassiz, L. 1862, in Morris and Roberts. Quart. Jour. Geol. Soc., xviii, 100.
Hay, O. P. 1902 A, 285.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 545.
Eastman, C. R. 1903 B, 170.
Jordan, D. S. 1907 B, 216.
1919 B, 320.
1923 A, 93.
Woodward, A. S. 1921 B, 34.
1924 A, 110.
Zittel and Woodward 1902 A, 37.

Copodus marginatus (Newb.).
Hay, O. P. 1902 A, 285.
Branson, E. B. 1906 A, 1394.
Hussakof, L. 1908 A, 29.
Mississippian (St. Louis); Indiana.

Copodus pusillus St. John and Worth.
Hay, O. P. 1902 A, 285.
Mississippian (Chester); Illinois.

Copodus vanhornii St. John and Worth.
Hay, O. P. 1902 A, 285.
Mississippian (St. Louis); Missouri, Illinois.

ACMONIODUS Hussakof and Bryant. Type *A. clarkei* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 151.
Woodward, A. S. 1921 B, 36.

Acmoniodus clarkei Hussakof and Bryant.
Hussakof and Bryant 1919 A, 13, 151, 308, pl. lv, fig. 3; text-fig. 53.
Upper Devonian (Lower Genesee); New York.

Superfamily HYBODONTOIDÆ, new form.

Hay, O. P. 1902 A, 285 (Heterodontoidea).
Agassiz, L. 1844 D, 142 ("cestracionts").
Bronn, H. G. 1849 A, 830, seq. (Cestraciontes).
Cope, E. D. 1891 N, 17 (Cestraciontidæ).
Duméril, A. 1856 A, 132 ("cestraciontes").
Eastman, C. R. 1902 F, 267 ("cestracionts").
Fitzinger, L. J. 1873 A, 55 (Cestraciontes).
Gill, T. 1882 A, 967 (Proarthri or Acrodonta).
1885 A, lxiv (Proarthri).
Goodrich, E. S. 1909 A, 145 (Heterodonti).
Gregory, W. K. 1907 A, 446 (Prosarthri).
Jaekel, O. 1911 A, 57 (Cestracionti).
Jordan, D. S. 1905 A, i, 526; ii, 562 (Cestraciontes).
1907 B, 187, 758 (Cestraciontes).
Krivetski, A. 1917 A, 19 (Cestracion).
Pompeckj, J. F. 1913 A, 1124 (Heterodonti).
Regan, C. T. 1906 A, 723, 746 (Squaloidei).
Ridewood, W. G. 1921 A, 313 (Squaloidei).

COCHLIODONTIDÆ Owen.

Hay, O. P. 1902 A, 286.
Abel, O. 1919 A, 133.
Arldt, T. 1907 D, 646.
1923 A, 487 ("cochliodontiden").
Bridge, T. W. 1904 A, 445, 736.
Cope, E. D. 1891 N, 17.
Dean, B. 1906 B, 136 ("cochliodonts").
Dollo, L. 1889 F, 341.
1906 B, 135 ("cochliodontes").
1907 B, 101 ("cochliodontes").
Eastman, C. R. 1903 D, 285 ("cochliodonts").
Goodrich, E. S. 1909 A, 146.

Gregory, W. K. 1907 D, 446.
Hay, O. P. 1901 B, 66, 70.
Jaekel, O. 1892 B, 158 ("cochliodontiden").
1928 A, 43 ("cochliodonten").
Jordan, D. S. 1905 A, i, 531; ii, 564.
1907 B, 758.
1923 A, 94.
Koken, E. 1904 A, 305 ("cochliodontiden").
Krause, P. G. 1901 A, 120 ("cochliodonten").
Pompeckj, J. F. 1913 A, 1128.
Regan, C. T. 1906 A, 723, 747, 749.
Schlosser, M. 1917 A, 133, 146 ("cochliodontiden").
Stromer, E. 1912 A, 22.
Woodward, A. S. 1904 C, 188.
1911 C, 46 ("cochliodonts").
1919 B, 380.
1921 B, 36.
1924 A, 109, 110.
Zittel and Koken 1911 A, 59.
Zittel and Schlosser 1923 A, 64.
Zittel and Woodward 1902 A, 35.

Helodus Agassiz. Type *H. simplex* Agassiz.

Hay, O. P. 1902 A, 286.
Agassiz, L. 1844 C, 267.
Barkas, W. J. 1874 D, 546.
Bronn, H. G. 1848 A, 583.
Coulon, L. 1903 A, 114.
Eastman, C. R. 1900 F, 581.
1903 B, 203.
1917 A, 259.
Giebel, C. G. 1855 A, 115.
Hay, O. P. 1901 B, 66.
Heilprin, A. 1887 A, 300.
Hoernes, R. 1886 A, 543.
Jordan, D. S. 1923 A, 94.
Owen, R. 1845 B, 61.
Savage, T. E. 1902 A, 257.
Stevenson, J. J. 1907 A, 168.
Woodward, A. S. 1921 B, 36.
1924 A, 109.
1924 B, 341.

Helodus angulatus Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Burlington); Illinois.

Helodus biformis Newb. and Worth.

Hay, O. P. 1902 A, 286.
Worthen, A. H. 1866 A, 115.
Mississippian (Kinderhook); Iowa.

Helodus carbonarius Newb. and Worth.

Hay, O. P. 1902 A, 286.
Pennsylvanian (Coal-measures); Illinois.

Helodus clivulus Branson.

Branson, E. B. 1914 A, 67, pl. iv, figs. 1, 2, 5, 6.
Upper Devonian (Craghead); Missouri.

Helodus comptus Eastman.

Eastman, C. R. 1909 A, 488.
1908 A, 112 (name only).
Pennsylvanian (Waverly); Pennsylvania.

Helodus coniculus Newb. and Worth.

Hay, O. P. 1902 A, 286.
Branson, E. B. 1906 A, 1382, pl. xli, figs. 5-7.
Eastman, C. R. 1903 B, 204.
Newberry, J. S. 1874 G, 90, 98.
Mississippian (Salem); Indiana: (Berea); Pennsylvania: (Burlington); Iowa: (Keokuk); Illinois.

Helodus consolidatus Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Keokuk); Missouri, Illinois.

Helodus crenulatus Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Keokuk); Illinois.

Helodus dens-humani Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Keokuk); Illinois.

Helodus denticulatus Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Keokuk); Illinois.

Helodus devonicus Branson.

Branson, E. B. 1914 A, 66, pl. iv, figs. 19, 20.
Upper Devonian (Craghead); Missouri.

Helodus elegantulus Branson.

Branson, E. B. 1906 A, 1383, pl. xlii, figs. 27-29.
Mississippian (Salem); Indiana.

Helodus elytra Newb. and Worth.

Hay, O. P. 1902 A, 286.
Mississippian (Keokuk); Illinois.

Helodus gibberulus Agassiz.

Hay, O. P. 1902 A, 286.
Eastman, C. R. 1902 B, 71.
1907 B, 20.
1908 A, 112, 287.
1909 A, 489.
Lambe, L. M. 1913 D, 19.
Upper Devonian (Chemung); Pennsylvania.

Helodus gibbus Leidy.

Hay, O. P. 1902 A, 286.
Mississippian (Warsaw); Illinois.

Helodus incipiens Branson.

Branson, E. B. 1914 A, 67, pl. iv. figs. 11-16.
Upper Devonian (Craghead); Missouri.

Helodus incisus Eastman.

Eastman, C. R. 1903 B, 204, pl. v, fig. 54.
Branson, E. B. 1906 A, 1382, pl. xli, figs. 10-12.
Mississippian (Salem); Indiana.

Helodus lævis Newb.

Hay, O. P. 1902 A, 286.
Branson, E. B. 1906 A, 1381, pl. xli, figs. 16-22.
Mississippian (Salem); Indiana.

Helodus limax Newb. and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Burlington); Iowa.

Helodus minutus Branson.

Branson, E. B. 1906 A, 1384, pl. xlii, figs. 32-34 (This genus?).
Mississippian (Salem); Indiana.

Helodus ornatus Branson.

Branson, E. B. 1906 A, 1383, pl. xlii, figs. 38-40.
Mississippian (Salem); Indiana.

Helodus politus Newb. and Worth.

Hay, O. P. 1902 A, 287.
Branson, E. B. 1916 A, 643.
Mississippian (Keokuk); Illinois.

Helodus robustus Branson.

Branson, E. B. 1906 A, 1382, pl. xlii, figs. 22-24.
Mississippian (Salem); Indiana.

Helodus rowleyi Branson.

Branson, E. B. 1914 A, 67, pl. iv, figs. 11-16.
Upper Devonian (Craghead); Missouri.

Helodus rugosus Newb. and Worth.

Hay, O. P. 1902 A, 287.
Branson, E. B. 1916 A, 643, pl. ii, fig. 10.
Eastman, C. R. 1903 B, 182, pl. ii, fig. 14.
Hussakof and Bryant 1919 A, 149.
Pennsylvanian (Atchison); Nebraska: (Embar); Wyoming; Pennsylvania.

Helodus subpolitus Branson.

Branson, E. B. 1916 A, 642, pl. i, figs. 6-16.
Pennsylvanian (Embar); Wyoming.

Helodus subtuberatus Lambe.

Lambe, L. M. 1912 B, 347.
Lambe, L. M. 1913 D, 20, pl. ii.
Upper Devonian; Alberta.

Helodus sulcatus Newb. and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Keokuk); Illinois.

Helodus undulatus Newb. and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Keokuk); Illinois.

Helodus wortheni Hay.

Hay, O. P. 1902 A, 287.
Mississippian (Burlington); Illinois.

Helodus sp. indet.

Branson, E. B. 1906 A, 1383.
Mississippian (Salem); Indiana.
Van Tuyl, F. M. 1925 A, 141.
Mississippian (Burlington); Iowa.

CRASSIDONTA BRANSON. Type *C. stuckenbergi* Branson.

Branson, E. B. 1916 A, 643.

Crassidonta stuckenbergi Branson.

Branson, E. B. 1916 A, 643, pl. 1, figs. 17-27.
Pennsylvanian (Embar); Wyoming.

VENUSTODUS St. John and Worth. Type *Chomatodus venustus* Leidy.

Hay, O. P. 1902 A, 287.
Eastman, C. R. 1903 B, 203.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 94.

Venustodus argutus St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Chester); Illinois.

Venustodus robustus St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Burlington); Iowa.

Venustodus tenuicristatus St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Keokuk); Illinois, Iowa, Missouri.

Venustodus variabilis St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Burlington); Illinois, Iowa.

Venustodus venustus (Leidy).

Hay, O. P. 1902 A, 287.
Mississippian (St. Louis); Illinois, Missouri.

XENODUS S. A. Miller. Type *Goniodus hertzeri* Newb.

Hay, O. P. 1902 A, 287.
Jordan, D. S. 1923 A, 94

Xenodus hertzeri (Newb.).

Hay, O. P. 1902 A, 287.

Claypole, E. W. 1896 B, 353 (Goniodus).
1903 A, 319, 346 (Goniodus).
Eastman, C. R. 1907 B, 18 (X. herzeri).
1908 A, 283 (X. herzeri).
Hussakof, L. 1908 A, 37.
Upper Devonian (Huron); Ohio.

PERIPLECTRODUS St. John and Worth. Type *P. warreni* St. John and Worth.

Hay, O. P. 1902 A, 287.
Davis, J. W. 1884 A, 632.
Eastman, C. R. 1902 B, 57.
1902 H, 150.

Eastman, C. R. 1903 D, 285.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1923 A, 94.

Periplectrodus compressus St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (St. Louis); Illinois.

Periplectrodus expansus St. John and Worth.

Hay, O. P. 1902 A, 287.
Mississippian (Chester); Illinois.

Periplectrodus warreni St. John and Worth.

Hay, O. P. 1902 A, 287.
Fuchs, T. 1900 A, 8, fig. 3.
Mississippian (Burlington); Illinois.

PSEPHODUS Agassiz. Type *Cochliodus magnus* Portlock.

Agassiz, L. 1862, in Morris and Roberts, Quart. Jour. Geol., xviii, 101.
Hay, O. P. 1902 A, 288.
Abel, O. 1912 F, 488.
1919 A, 136.
Arldt, T. 1923 A, 487 (Psephodus, Tæniodus).
Barkas, W. J. 1874 D, 548.
Branson, E. B. 1905 A, 20.
Coulon, L. 1903 A, 114.
Eastman, C. R. 1917 A, 259.
Jaekel, O. 1911 A, 56, fig. 51.
Jordan, D. S. 1919 B, 320.
1923 A, 94.
Leriche, M. 1908 B, 272.
Pompeckj, J. F. 1913 A, 1128.
St. John and Worthen 1883 A, 59, 63 (Psephodus); 75 (Tæniodus).
Woodward, A. S. 1898 B, 42, fig. 33.
Zittel and Koken 1911 A, 60.
Zittel and Schlosser 1923 A, 65, fig. 106.
Zittel and Woodward 1902 A, 36.

Psephodus acutus Branson.

Branson, E. B. 1905 A, 24, pl. i, fig. 1.
Pennsylvanian; Illinois.

Psephodus carbonarius Branson.

Branson, E. B. 1905 A, 25, pl. i, fig. 7.
Pennsylvanian; Indiana.

Psephodus crenulatus (Newb. and Worth.).

Hay, O. P. 1902 A, 288.
Branson, E. B. 1905 A, 22.
Newberry and Worthen 1866 A, 94, pl. viii. figs. 12, 12a (Aspidodus convolutus).
Mississippian (Chester); Illinois, Kentucky, Missouri, Indiana.

Psephodus latus St. John and Worth.

Hay, O. P. 1902 A, 288.
Branson, E. B. 1906 A, 1387, pl. xli, fig. 23 (This species?).
Mississippian (Salem); Indiana: (St. Louis); Illinois and Missouri.

Psephodus legrandensis Branson.

Branson, E. B. 1905 A, 22, 24, pl. i, fig. 2.
Eastman, C. R. 1917 A, 259, pl. xviii, fig. 2.
Leriche, M. 1908 B, 273 ("Deltodus").
Mississippian (Kinderhook); Iowa.

Psephodus lunulatus St. John and Worth.

Hay, O. P. 1902 A, 288.
Mississippian (Chester); Illinois.

Psephodus obliquus St. John and Worth.

Hay, O. P. 1902 A, 288.
Branson, E. B. 1905 A, 22.
Mississippian (Kinderhook); Iowa.

Psephodus placenta (Newb. and Worth.).

Hay, O. P. 1902 A, 288.
Worthen, A. H. 1866 A, 115 (Helodus).
Mississippian (Kinderhook); Iowa.

Psephodus politus Newb.

Hay, O. P. 1902 A, 288.
Mississippian (Burlington); Illinois.

Psephodus regularis (St. John and Worth.).

Hay, O. P. 1902 A, 288.
Branson, E. B. 1906 A, 1388, pl. xli, fig. 32.
Mississippian (Salem); Indiana.

Psephodus? reticulatus St. John and Worth.

Hay, O. P. 1902 A, 288.
Eastman, C. R. 1903 B, 204.
Mississippian (Kinderhook); Iowa.

Psephodus? symmetricus St. John and Worth.

Hay, O. P. 1902 A, 288.
Mississippian (Kinderhook); Iowa.

Psephodus sp. indet.

Branson, E. B. 1906 A, 138.
1914 A, 68, pl. iv, fig. 18.
Mississippian (Salem); Indiana; Upper Devonian; Missouri.

SANDALODUS Newb. and Worth. Type *S. angustus* St. John and Worth.

Hay, O. P. 1902 A, 288.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 548.
Branson, E. B. 1905 A, 25.
1916 A, 652.
Dean, B. 1906 B, 139.
Eastman, C. R. 1902 B, 57.
1903 B, 196.
1917 A, 260.
Fuchs, T. 1900 A, 7.

Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 342.
1923 A, 94.
St. John, O. 1902 A, 659.
Zittel and Koken 1911 A, 60.
Zittel and Schlosser 1923 A, 65.
Zittel and Woodward 1902 A, 36.

Sandalodus alatus (Newb. and Worth.).
Hay, O. P. 1902 A, 292 (Deltodus).
Branson, E. B. 1905 A, 30, pl. i, figs. 3-5.
Leriche, M. 1908 B, 277 (Deltodus).
Mississippian (Keokuk and Burlington); Iowa, Illinois.

Sandalodus angustus Newb. and Worth.
Hay, O. P. 1902 A, 288.
Mississippian (Keokuk); Illinois.

Sandalodus carbonarius Newb. and Worth.
Newberry and Worthen 1866 A, 104, pl. x, figs. 4, 5.
Hay, O. P. 1902 A, 289 (Orthopleurodus angularis, in part).
Eastman, C. R. 1903 B, 181 (From Orthopleurodus).
Worthen, A. H. 1866 A, 61.
Pennsylvanian (Missourian); Kansas, Nebraska, Iowa, Missouri: (Coal measures); Illinois, Indiana.

Sandalodus convolutus Branson.
Branson, E. B. 1906 A, 1386, pl. xlii, figs. 42-45.
Mississippian (Salem); Indiana.

Sandalodus ellipticus Newb.
Hay, O. P. 1902 A, 289.
Mississippian (Kinderhook); Iowa.

Sandalodus emarginatus Branson.
Branson, E. B. 1905 A, 29, pl. ii, figs. 1-3.
Mississippian (Keokuk); Iowa.

Sandalodus lævissimus Newb. and Worth.
Hay, O. P. 1902 A, 289 (S. crassus; S. rhomboideus).
Branson, E. B. 1906 A, 1385.
Eastman, C. R. 1900 F, 582, fig. 1.
Eastman, C. R. 1903 B, 196, fig. 11.
Hussakof, L. 1908 A, 36 (S. crassus).
Newberry and Worthen 1866 A, 104, pl. x, figs. 6-8.
St. John and Worthen 1883 A, 186, pl. xii, figs. 8, 9 (and 5?).
Savage, T. E. 1902 A, 256, 262.
Mississippian (Keokuk); Iowa, Illinois, and Missouri: (Salem); Indiana.

Sandalodus latidens Branson.
Branson, E. B. 1905 A, 31, pl. i, fig. 11.
Mississippian (Keokuk); Iowa.

Sandalodus? minor (Newb. and Worth.).
Hay, O. P. 1902 A, 289.
Barkas, W. J. 1874 D, 548 (Trigonodus minor).
Branson, E. B. 1906 A, 1394.
Mississippian (Keokuk); Illinois: (Salem); Indiana.

Sandalodus occidentalis (Leidy).
Hay, O. P. 1902 A, 292 (Deltodus complanatus, D. occidentalis).
Barkas, W. J. 1874 D, 548 (Trigonodus major).
Branson, E. B. 1905 A, 26, 28, pl. i, figs. 8, 9.
1906 A, 1384, pl. xli, fig. 33.
Eastman, C. R. 1903 B, 198 (Sandalodus complanatus); 200, pl. iv, fig. 38; pl. v, fig. 53 (Deltodus occidentalis).
1917 A, 260, pl. viii, fig. 3 (Deltodus).
Savage, T. E. 1902 A, 256, 262 (Deltodus occidentalis?).
Mississippian (Keokuk, Kinderhook, Burlington, St. Louis); Illinois, Missouri: (Salem); Indiana.

Sandalodus parvulus Newb. and Worth.
Hay, O. P. 1902 A, 289.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Sandalodus porcatus Branson.
Branson, E. B. 1905 A, 30, pl. i, fig. 14.
Branson, E. B. 1906 A, 1386, pl. xli, fig. 26.
Mississippian (St. Louis); Indiana.

Sandalodus sp. indet.
Hay, O. P. 1902 A, 289. Mississippian (Warsaw); Illinois.

ORTHOPLEURODUS St. John and Worth.

Hay, O. P. 1902 A, 289.
Eastman, C. R. 1903 B, 181 (Deltodus).
Hay, O. P. 1901 B, 66.
Hayden, F. V. 1872 A, 132 (Xystrodus).
Jordan, D. S. 1919 B, 405 (Syn. of Sandalodus).
1919 D, 405 (Type said to be *O. convexus*).
1923 A, 94.
It is to be noted that *O. angularis*, the type of this genus, is referred by Eastman to *Deltodus*. If this is accepted, the other species follow.

Orthopleurodus angularis (Newb. and Worth.).
Hay, O. P. 1902 A, 289.

Type *O. angularis* (Newb. and Worth.).

Eastman, C. R. 1903 B, 181, pl. ii, fig. 19 (Deltodus).
Hayden, F. V. 1872 A, 127 (Xystrodus occidentalis).
Meek, F. B. 1869 A, 3 (Xystrodus? Name only).
1872 A, 101-127 (Deltodus?); 112-127 (Xystrodus?).
Newberry and Worthen 1866 A, 104, pl. x, figs. 4, 5. (Sandalodus carbonarius).
Woodruff, E. G. 1906 A, 290 (Deltodus).
Worthen, A. H. 1866 A, 61 (Cochliodus).
Pennsylvanian (Coal-measures); Indiana, Illinois, Iowa, Missouri, Kansas, Nebraska.

Orthopleurodus convexus St. John and Worth.

Hay, O. P. 1902 A, 289.
Pennsylvanian (Coal-measures); West Virginia.

Orthopleurodus novo-mexicanus St. John and Worth.

Hay, O. P. 1902 A, 289.
Cockerell, T. D. A. 1908 C, 161.
Mississippian; New Mexico.

PLATYODUS Newb. Type *P. lineatus* Newb.

Hay, O. P. 1902 A, 290.
Jordan, D. S. 1923 A, 94.

Platyodus lineatus Newb.

Hay, O. P. 1902 A, 290.
Hussakof, L. 1908 A, 33.
Mississippian (Waverly); Kentucky.

VATICINODUS St. John and Worth. Type *V. vetustus* St. John and Worth.

Hay, O. P. 1902 A, 290.
Arldt, T. 1923 A, 487.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 405 (Syn. of Sandalodus).
1923 A, 94.

Vaticinocus? carbonarius St. John and Worth.

Hay, O. P. 1902 A, 290.
Pennsylvanian (Lower); Illinois.

Vaticinodus discrepans St. John and Worth.

Hay, O. P. 1902 A, 290.
Mississippian (Burlington); Iowa.

Vaticinodus? lepis St. John and Worth.

Hay, O. P. 1902 A, 290.
Pennsylvanian (Upper Coal-measures); Illinois.

Vaticinodus? similis St. John and Worth.

Hay, O. P. 1902 A, 290.
Mississippian (Chester); Illinois.

Vaticinodus? simplex St. John and Worth.

Hay, O. P. 1902 A, 290.
Mississippian (St. Louis); Illinois, Missouri, Iowa.

Vaticinodus vetustus St. John and Worth.

Hay, O. P. 1902 A, 290.
Mississippian (Kinderhook); Iowa.

PLATYXYSTRODUS Hay. Type *Cochliodus striatus* M'Coy.

Hay, O. P. 1902 A, 290.
Arldt, T. 1923 A, 487 (Xystrodus).
Eastman, C. R. 1903 B, 180.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1920 C, 480.
1923 A, 94.

Platyxystrodus bellulus (St. John and Worth.).

Hay, O. P. 1902 A, 290.
Pennsylvanian (Lower Coal-measures); Illinois.

Platyxystrodus imitatus (St. John and Worth.).

Hay, O. P. 1902 A, 290.
Mississippian (St. Louis); Missouri, Illinois, Iowa.

Platyxystrodus inconditus (St. John and Worth.).

Hay, O. P. 1902 A, 290.
Mississippian (Keokuk); Illinois, Iowa.

Platyxystrodus occidentalis (St. John).

St. John, O. 1870 A, 436 (Xystrodus).
Hay, O. P. 1902 A, 289 (Orthopleurodus angularis, in part).
Eastman, C. R. 1903 B, 181 (This genus?).
St. John, O. 1872 A, 244, pl. iv, fig. 18 (Xystrodus?).
Pennsylvanian (Missourian); Nebraska.

Platyxystrodus simplex (St. John and Worth.).

Hay, O. P. 1902 A, 290.
Mississippian (Burlington); Iowa, Illinois.

Platyxystrodus verus (St. John and Worth.).

Hay, O. P. 1902 A, 290.
Mississippian (Chester); Illinois.

ICANODUS S. A. Miller. Type *Tomodus convexus* St. John and Worth.

Hay, O. P. 1902 A, 291.
Barkas, W. J. 1874 D, 548 (Tomodus).
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1923 A, 94.

Icanodus limitaris (St. John and Worth.).

Hay, O. P. 1902 A, 291.
Mississippian (Burlington); Iowa.

STENOPTERODUS St. John and Worth. Type *S. planus* St. John and Worth.

Hay, O. P. 1902 A, 291.
1901 B, 67.
Jordan, D. S. 1919 B, 405 (Syn. of Deltodus).
1923 A, 94.

Stenopterodus elongatus St. John and Worth.

Hay, O. P. 1902 A, 291.
Mississippian (Warsaw); Illinois.

Stenopterodus planus St. John and Worth.

Hay, O. P. 1902 A, 291.
Mississippian (Burlington); Iowa, Illinois.

Stenopterodus sp. indet.

Hay, O. P. 1902 A, 291.
Mississippian (Keokuk); Illinois.

DELTODOPSIS St. John and Worth. Type *D. angustus* (Newb. and Worth.).

Hay, O. P. 1902 A, 291.
Arldt, T. 1923 A, 487.
Fuchs, T. 1900 A, 7.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 405.
1923 A, 94.

Deltodopsis affinis St. John and Worth.

Hay, O. P. 1902 A, 291.
Mississippian (Warsaw); Illinois.

Deltodopsis angustus (Newb. and Worth.).

Hay, O. P. 1902 A, 291.
Mississippian (Chester); Illinois.

Deltodopsis? bialveatus St. John and Worth.

Hay, O. P. 1902 A, 291.

Branson, E. B. 1906 A, 1391, pl. xli, figs. 8, 9.
Mississippian (Salem); Indiana: (Burlington, Keokuk); Iowa.

Deltodopsis? exornatus St. John and Worth.

Hay, O. P. 1902 A, 291.
Mississippian (Warsaw); Illinois.

Deltodopsis? inflexus St. John and Worth.

Hay, O. P. 1902 A, 291.
Mississippian (Keokuk); Illinois.

Deltodopsis sancti-ludovici St. John and Worth.

Hay, O. P. 1902 A, 291.
Branson, E. B. 1906 A, 1391.
Mississippian (St. Louis); Iowa, Illinois, Missouri.

DELTODUS Agassiz. Type *Pœcilodus sublœvis* M'Coy.

Agassiz, L. 1862, in Morris and Roberts, Quart. Jour. Geol., xviii, 100.
Hay, O. P. 1902 A, 291.
Barkas, W. J. 1874 D, 546.
Branson, E. B. 1905 A, 25.
1906 A, 1394, pl. xlii, fig. 37 (This genus?).
1916 A, 652.
Coulon, L. 1903 A, 114.
Dean, B. 1906 B, 136 ("deltodonts").
Eastman, C. R. 1903 B, 196, 198.
1917 A, 261.
Fuchs, T. 1900 A, 7.
Jaekel, O. 1926 B, 43 ("deltodonten").
Hay, O. P. 1901 B, 66.
Hayden, F. V. 1872 A, 132.
Jordan, D. S. 1923 A, 94.
Leriche, M. 1908 B, 275.
Savage, T. E. 1902 A, 257.
Stevenson, J. J. 1907 A, 168.

Deltodus attenuatus Branson.

Branson, E. B. 1905 A, 33, pl. i, fig. 6.
Pennsylvanian; Missouri.

Deltodus cinctulus St. John and Worth.

Hay, O. P. 1902 A, 292.
Mississippian (Warsaw); Missouri, Illinois.

Deltodus cinctus Newb.

Hay, O. P. 1902 A, 292 (D. cinctus, D. parvus).
Branson, E. B. 1906 A, 1390, pl. xlii, fig. 41 (D. parvus a syn.).
Mississippian (Salem); Indiana: (St. Louis); Iowa: (St. Louis); Missouri.

Deltodus cingulatus Newb. and Worth.

Hay, O. P. 1902 A, 292.
Mississippian (Chester); Illinois.

Deltodus fasciatus Newb. and Worth.

Hay, O. P. 1902 A, 292.
Mississippian (Keokuk); Illinois: Warsaw?); Illinois: (St. Louis?); Iowa.

Deltodus grandis Newb.

Hay, O. P. 1902 A, 292.
Branson, E. B. 1905 A, 25.
Mississippian (Keokuk); Illinois.

Deltodus inornatus Newb.

Hay, O. P. 1902 A, 292.
Mississippian (Kinderhook); Iowa.

Deltodus intermedius St. John and Worth.

Hay, O. P. 1902 A, 292.
Branson, E. B. 1906 A, 1384 (Sandalodus occidentalis).
Keyes, C. R. 1897 A, 322.
Mississippian (St. Louis); Iowa, Illinois.

Deltodus latior St. John and Worth.

Hay, O. P. 1902 A, 292.
Branson, E. B. 1906 A, 1389 (D. spatulatus).
Eastman, C. R. 1903 B, 200, pl. v, fig. 53 (var. of D. occidentalis).
Mississippian (Keokuk); Illinois, Iowa.

Deltodus littoni Newb. and Worth.

Hay, O. P. 1902 A, 292.
Hussakof, L. 1908 A, 30.
Mississippian (St. Louis); Missouri.

Deltodus mercurii Newb.

Hay, O. P. 1902 A, 292.
Branson, E. B. 1916 A, 648, pl. ii, figs. 27, 28; pl. v, figs. 1-11; pl. vi, figs. 1-6.
Cockerell, T. D. A. 1908 C, 161.
Hussakof, L. 1908 A, 31.
Pennsylvanian; New Mexico, Wyoming.

Deltodus obliquus (St. John and Worth.).

Hay, O. P. 1902 A, 292.
Mississippian (Chester); Illinois.

Deltodus planidens Cope.

Hay, O. P. 1902 A, 292.
Montgomery, T. H. 1904 A, 57 (Deltodes).
Pennsylvanian?; Texas.

Deltodus powellii St. John and Worth.

Hay, O. P. 1902 A, 292.
Pennsylvanian; Colorado.

Deltodus propinquus St. John and Worth.

Hay, O. P. 1902 A, 293.
Pennsylvanian; Illinois.

Deltodus spatulatus Newb. and Worth.

Hay, O. P. 1902 A, 291 (Deltodopsis convolutus?); 293 (D. spatulatus); 294 (Cochliodus costatus).
Branson, E. B. 1905 A, 26, 28, 31, pl. i, figs. 10-13.
1906 A, 1388, pl. xli, fig. 34 (Includes Cochliodus costatus and Deltodopsis convolutus).
Eastman, C. R. 1903 B, 198, pl. iv, figs. 41, 42; pl. v, fig. 55 (D. convolutus a syn.); 201 (Cochliodus costatus).
Fuchs, T. 1900 A, 8, fig. 2 (Deltodopsis convolutus).
Newberry and Worthen 1870 A, pl. iii, fig. 11.
Savage, T. E. 1902 A, 256, 262.
Van Tuyl, F. M. 1925 A, 141.
Mississippian (Kinderhook); Iowa: (Burlington); Illinois: (Salem); Indiana.

Deltodus trilobus St. John and Worth.

Hay, O. P. 1902 A, 293.
Branson, E. B. 1906 A, 1389, pl. xli, figs. 27, 28.
Mississippian (Kinderhook, Burlington); Illinois: Iowa (Salem); Indiana.

Deltodus undulatus Newb. and Worth.

Hay, O. P. 1902 A, 293.
Eastman, C. R. 1900 F, 582.
Mississippian (Keokuk); Iowa.

Deltodus sp. indet.

Branson, E. B. 1906 A, 1391, pl. xli, fig. 24.
Mississippian (Salem); Indiana.

Chitonodus St. John and Worth. Type *C. springeri* St. John and Worth.

Hay, O. P. 1902 A, 293 (Chitinodus, *errore*).
Jordan, D. S. 1919 B, 405.
1919 D, 405 (Type said to be *Cochliodus latus*).
1920 C, 425 (Type said to be *C. springeri*).
1923 A, 94.
Zittel and Schlosser 1923 A, 65 (Chitinodus).

Chitonodus antiquus St. John and Worth.

Hay, O. P. 1902 A, 293 (Chitinodus).
Mississippian (Burlington); Iowa.

Chitonodus liratus St. John and Worth.

Hay, O. P. 1902 A, 293 (Chitinodus).
Mississippian (St. Louis); Illinois.

Chitonodus springeri St. John and Worth.

Hay, O. P. 1902 A, 293 (Chitinodus).
Mississippian (Burlington); Illinois, Iowa.

Pœcilodus M'Coy. Type *P. jonesii* M'Coy.

Hay, O. P. 1902 A, 293.
Agassiz, L. 1844 C, 267.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 548 (Pœcilodus).
Bronn, H. G. 1848 B, 1022.
1849 A, 647.
Eastman, C. R. 1903 B, 202.
Egerton, P. G. 1853 C, 282.
Hay, O. P. 1901 B, 66.
Jordan, D. S. 1919 B, 266.
Jordan, D. S. 1923 A, 94.
Ridewood, W. G. 1896 A, 387.
Savage, T. E. 1902 A, 257.
Woodward, A. S. 1898 B, 42, fig. 33.
Zittel and Koken 1911 A, 60.

Pœcilodus carbonarius St. John and Worth.

Hay, O. P. 1902 A. 293.
Pennsylvanian; Illinois, Kansas.

Pœcilodus cestriensis St. John and Worth.

Hay, O. P. 1902 A, 293.
Mississippian (Chester); Illinois.

Pœcilodus convolutus Newb. and Worth.

Hay, O. P. 1902 A, 293.
Mississippian (Keokuk); Illinois, Iowa.

Pœcilodus rugosus (Newb and Worth.).

Hay, O. P. 1902 A, 293 (Chitinodus).
Eastman, C. R. 1903 B, 202.
Savage, T. E. 1902 A, 262.
Mississippian (Keokuk); Illinois, Iowa.

Pœcilodus tribulis (St. John and Worth.).

Hay, O. P. 1902 A, 293 (Chitinodus).
Eastman, C. R. 1903 B, 203.
Mississippian (Keokuk); Iowa, Illinois.

Pœcilodus varsoviensis St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (Warsaw); Illinois.

STREBLODUS Agassiz. Type *Cochliodus oblongus* M'Coy.

Agassiz, L. 1862, in Morris and Robert's, Quart. Jour. Geol. Soc., xviii, 101.
Eastman, C. R. 1903 B, 182.
Jordan, D. S. 1919 B, 320.
Woodward, A. S. 1889 D, 209.
Zittel and Schlosser 1923 A, 65.
Zittel and Woodward 1902 A, 36.

Streblodus angustus Eastman.

Eastman, C. R. 1903 B, 182, pl. ii, fig. 20, text-fig. 9.
Woodruff, E. G. 1906 A, 290.
Pennsylvania (Atchison); Nebraska.

COCHLIODUS Agassiz. Type *C. contortus* Agassiz.

Hay, O. P. 1902 A, 294.
Abel, O. 1912 F, 488.
Agassiz, L. 1844 C, 267.
Aichel, O. 1919 A, 242.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 545.
Böklen, H. 1887 A, 77.
Branson, E. B. 1905 A, 22.
Bronn, H. G. 1848 A, 317.
1849 A, 647.
Eastman, C. R. 1902 B, 57.
Fuchs, T. 1900 A, 7.
Giebel, C. G. 1855 A, 115.
Goodrich, E. S. 1909 A, 146.
Hay, O. P. 1901 B, 66.
Heilprin, A. 1887 A, 300.
Jaekel, O. 1911 A, 53.
1926 B, 43 ("cochliodonten").
Jordan, D. S. 1923 A, 94.
Leriche, M. 1908 B, 278.
Owen, R. 1845 B, 62, pl. xxii, fig. 1.
Peyer, B. 1920 A, 109.
Pompeckj, J. F. 1913 A, 1128, fig. 31.
Reynolds, S. H. 1897 A, 109.
Ridewood, W. G. 1896 A, 385, 387, figs. 11, 12.
Terra, P. 1911 A, 200, fig. 46.
Van de Wiele, C. 1902 A, 245 ("cochliodontidés").
Woodward, A. S. 1915 B, lxvi ("cochliodonts").
Zittel and Koken 1911 A, 59.
Zittel and Schlosser 1923 A, 65, fig. 105.
Zittel and Woodward 1902 A, 35.

Cochliodus latus Leidy.

Hay, O. P. 1902 A, 293 (Chitinodus).
Eastman, C. R. 1900 F, 582 (Helodus coxanus a syn.)
1902 B, 57.
Eastman, C. R. 1902 D, 659.
1903 B, 199, 205.
1909 A, 489.
Merrill, G. P. 1907 A, 11 (Helodus coxanus).
Van Tuyl, F. M. 1925 A, 150, 154 (C. nobilis).
Mississippian (Keokuk); Illinois, Iowa.

Cochliodus leidyi St. John and Worth.

Hay, O. P. 1902 A, 294.
Eastman, C. R. 1902 D, 658.
Mississippian (Chester); Illinois.

Cochliodus obliquus St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (St. Louis); Missouri.

Cochliodus sancti-ludovici (St. John and Worth.).

Hay, O. P. 1902 A, 293 (Pœcilodus).
Eastman, C. R. 1902 D, 658, 659.
St. John, O. 1902 A, 658, fig. 4.
Mississippian (St. Louis); Illinois, Iowa.

Cochliodus vanhornii St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (St. Louis); Illinois, Iowa, Missouri.

Cochliodus sp. indet.

Branson, E. B. 1906 A, 1394, pl. xlii, fig. 37 (Cochliodus or Deltodus).
Mississippian (Salem); Indiana.

DELTOPTYCHIUS Agassiz, L. Type *Cochliodus acutus* M'Coy.

Agassiz, L. 1862, in Morris and Roberts, Quart. Jour. Geol., xviii, 100.
Hay, O. P. 1902 A, 294.
Abel, O. 1912 F, 488.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 546.
Eastman, C. R. 1903 B, 196.
Hay, O. P. 1901 B, 67.
Jaekel, O. 1892 B, 157.
Jordan, D. S. 1919 B, 320.
1923 A, 94
Woodward, A. S. 1921 B, 37.
1924 A, 109.
Zittel and Koken 1911 A, 60.
Zittel and Schlosser 1923 A, 65.

Deltoptychius expansus St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (St. Louis); Illinois, Iowa, Missouri.

Deltoptychius nitidus (Leidy).

Hay, O. P. 1902 A, 294.
Mississippian (Chester); Illinois.

Deltoptychius primus St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (Burlington); Iowa.

Deltoptychius springeri (St. John and Worth.).

Hay, O. P. 1902 A, 293 (Pœcilodus).
Cockerell, T. D. A. 1908 C, 161 (Pœcilodus).
Eastman, C. R. 1903 B, 202 (To Deltoptychius).
Mississippian; New Mexico.

Deltoptychius varsoviensis St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (Warsaw); Illinois.

Deltoptychius wachsmuthi St. John and Worth.

Hay, O. P. 1902 A, 294.
Mississippian (Keokuk); Illinois, Iowa, Missouri.

Deltoptychius wortheni (St. John and Worth.).

Hay, O. P. 1902 A, 294 (Pœcilodus).
Eastman, C. R. 1903 B, 202 (To Deltoptychius).
Mississippian (Chester); Illinois.

HYBODONTIDÆ Owen.

Owen, R. 1846 E, 51.
Hay, O. P. 1902 A, 295 (Orodontidæ); 298 (Heterodontidæ).
Abel, O. 1912 F, 489, 565 (Cestracionidæ).
1919 A, 121 (Heterodontidæ).
Agassiz, L. 1844 D, 142 ("cestraciontes").
1874 A, 131 (Cestracion).
Allis, E. P. 1915 A, 577 (Cestracion).
Ameghino, F. 1906 A, 187 (Cestraciontidæ).
Arldt, T. 1907 D, 644 (Cestracionidæ); 659 (Hybodontidæ).
1923 A, 487 ("hybodontiden").
Beer, G. R. 1924 A, 17, figs. 1-7, 15 (Heterodontus).
1924 B, 39, figs. 1-21 (Heterodontus).
1924 C, 298, figs. 11, 12, 41 (Heterodontus).
1925 A, 270, figs. 2-6, 107, 109, 116 (Heterodontus).
Bonaparte, C. L. 1840 A, 46 (Cestraciontina).
Bridge, T. W. 1904 A, 444, 742 (Heterodontidæ).
Bronn, H. G. 1849 A, 830, seq. (Cestraciontes).
Carus, V. 1875 A, 602 (Cestraciontidæ).
Chapman, F. 1918 A, 5 (Cestraciontidæ).
Cunningham, J. T. 1912 A, 246 (Heterodontidæ).
Daniel, J. F. 1914 A, 147, pls. viii, ix, figs. 1-4 (Heterodontus).
1915 A, 447, pls. i-viii (Heterodontus).
1916 A, 353 (Heterodontus).
Day, E. C. H. 1865 A, 565 ("cestracionts").
Dean, B. 1906 B, 155 ("cestracionts").
Deecke, W. 1913 A, 80 ("hybodontiden").
Dollo, L. 1889 F, 341 (Cestraciontidæ).
Dollo, L. 1904 C, 50 (Cestraciontidæ).
Duméril, A. 1856 A, 132 ("cestraciontes").
Eastman, C. R. 1902 B, 56 (Cestracion); 70 (Cestraciontidæ).
1902 F, 267 ("cestracionts").
Fowler, H. W. 1911 A, 26 (Heterodontidæ).
Fürbringer, K. 1903 A, 362 (Cestraciontidæ).
1904 B, 461 (Cestracion).
Gegenbaur, C. 1870 B, 450, pl. xvi, figs. 18-20 (Heterodontus).
1870 C, 402, fig. 18 (Heterodontus).
Gill, T. 1872 C, 23 (Heterodontidæ).
1885 A, lxiv (Heterodontidæ).
1905 A, 657 (Heterodontidæ).
Goodrich, E. S. 1909 A, 145 (Cestraciontidæ).
Gregory, W. K. 1907 D, 446 (Cestraciontidæ, Orodontidæ).
Hawkes, O. A. M. 1905 A, 81 (Heterodontidæ).
Hay, O. P. 1901 B, 67, 70 (Heterodontidæ); 67, 71 (Orodontidæ).
1909 C, 58 (Heterodontus).
Hoernes, R. 1886 A, 542 (Cestraciontidæ).
Huber, O. 1901 A, 609 (Cestraciontidæ).
Humphreys, J. 1908 A, 10 (Cestracion).
Jaekel, O. 1903 C, 389 ("orodontiden").
Jordan, D. S. 1905 A, i, 527 (Hybodontidæ); 528 (Orodontidæ); ii, 574 (Heterodontidæ).
1907 B, 184, 188, 758 (Heterodontidæ, Orodontidæ, Hybodontidæ).
1923 A, 95 (Orodontidæ, Heterodontidæ).
1925 B, 7 (Heterodontidæ).
Jordan and Evermann 1917 A, 95 (Heterodontus).

Jordan and Gilbert 1882 A, 32, 62 (Cestraciontidæ).
Kerr, J. G. 1908 A, 169 (Heterodontus).
Koken, E. 1904 A, 305 ("hybodontiden," Cestracionidæ).
1907 A, 272 ("cestraciontiden").
Leigh-Sharpe, W. H. 1926 A, 337 (Cestracionidæ).
Leunis and Ludwig 1883 A, 785 (Cestraciontidæ).
Luther, A. 1909 A, 3 (Heterodontidæ).
Miklouho-Maclay and Macleay 1879 A, 307 (Heterodontidæ); 320 (Heterodonti).
Mummery, J. H. 1917 A, 251 (Cestracion).
Osburn, R. C. 1907 A, 418 (Cestracion).
1907 B, 174 ("cestracion").
Owen, R. 1845 B, 32, pls. x-xiii ("cestracionts").
Pompeckj, J. F. 1913 A, 1123, 1126 (Hybodontidæ, Cestraciontidæ).
Rabinerson, A. 1925 A, 560, figs. 1, 2 (Cestracion).
Rauther, M. 1913 A, 1098 (Heterodontidæ).
Regan, C. T. 1906 A, 749, 750 (Cestracicntidæ, Hybodontidæ); 723 (Hybodontinæ).
1908 C, 493 (Cestraciontidæ).
Regan, C. T. 1908 D, 493 (Cestraciontidæ).
Ridewood, W. G. 1921 A, 369 (Cestraciontidæ).
Schlosser, M. 1917 A, 133, 134, 135, 136, 137, 139, 141, 147 ("cestraciontiden," "hybodontiden").
Schmalhausen, J. J. 1913 A, 24 (Heterodontidæ).
Secerov, S. 1911 A, 8, 10, pl. i (Cestracion).
Steinmann, G. 1907 A, 400 (Hybodontidæ, Cestraciontidæ).
Stromer, E. 1912 A, 19 (Cestraciontidæ); 20 (Hybodontidæ).
Strüver, J. 1864 B, 12, pls. i, ii (Heterodontoidæ).
Terra, P. 1911 A, 199 (Cestraciontidæ).
Van Wijhe, J. W. 1922 A, 291 (Cestracionidæ).
Versluys, J. 1922 B, 96 (Heterodontidæ).
Waite, E. R. 1896 A, 325 ("cestracions").
Wallace, A. R. 1876 A, ii, 461 (Cestraciontidæ).
Whitehouse, R. H. 1910 C, 325 (Heterodontus).
Woodward, A. S. 1891 E, 62 ("hybodonts," "cestracionts").
1912 A, (1911), 213 (Cestraciontidæ).
1921 B, 37 ("hybodonts").
Zittel and Koken 1911 A, 53, 56 (Hybodontidæ, Cestracionidæ).
Zittel and Schlosser 1923 A, 58 (Hybodontidæ).

Orodus Agassiz. Type *O. cinctus* Agassiz.

Hay, O. P. 1902 A, 295.
Agassiz, L. 1844 C, 267.
Barkas, W. J. 1874 D, 547.
Bronn, H. G. 1848 B, 852.
1849 A, 646.
Cushing, H. P. 1912 A, 581.
Dean, B. 1909 C, 249.
Eastman, C. R. 1902 B, 77.
1907 B, 75.
1909 A, 489.
Eastman, Gregory and Matthew 1917 A, 117.
Egerton, P. G. 1853 C, 282.
Giebel, C. G. 1855 A, 115.
Goodrich, E. S. 1909 A, 147.
Hay, O. P. 1901 B, 67, 70.
1912 A, 36.
Heilprin, A. 1887 A, 300.
Hoernes, R. 1886 A, 543.
Jordan, D. S. 1923 A, 95.
Mantell, G. A. 1844 A, 618, fig. 128.
Miller, A. M. 1916 A, 72.
Pompeckj, J. F. 1913 A, 1125.
Raymond, P. E. 1925 B, 554.
Savage, T. E. 1902 A, 257.
Schlosser, M. 1917 A, 133.
Zittel and Koken 1911 A, 53.
Zittel and Schlosser 1923 A, 59, figs. 15, 92.

Orodus alleni St. John and Worth.

Hay, O. P. 1902 A, 295.
Pennsylvanian; Iowa.

Orodus carinatus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Keokuk); Iowa.

Orodus colletti Newb.

Hay, O. P. 1902 A, 295.
Branson, E. B. 1906 A, 1394.
Mississippian (Salem); Indiana.

Orodus dædaleus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Kinderhook); Iowa.

Orodus decussatus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Kinderhook); Iowa.

Orodus devonicus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 153, pl. xliv, fig. 4.
Upper Devonian (Genesee); New York.

Orodus elegantulus Newb. and Worth.

Hay, O. P. 1902 A, 295.
Claypole, E. W. 1903 A, 319, 321.
Eastman, C. R. 1907 B, 18.
Hussakof and Bryant 1919 A, 153.
Mississippian (Burlington); Iowa, Indiana: Mississippian?; Ohio.

Orodus fastigiatus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Burlington); Iowa.

Orodus gibbosus (Newb. and Worth.).

Hay, O. P. 1902 A, 295.
Mississippian (Keokuk); Illinois, Iowa.

Orodus intermedius Eastman.

Eastman, C. R. 1903 B, 183, pl. iv, figs. 35, 36.
Pennsylvanian (Missourian); Missouri.

Orodus major St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Burlington); Iowa.

Orodus mammillaris Newb. and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Keokuk); Illinois.

Orodus minutus Newb. and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Keokuk); Illinois.

Orodus neglectus St. John and Worth.

Hay, O. P. 1902 A, 295.
Branson, E. B. 1906 A, 1391, pl. xlii, figs. 35, 36 (This species?).
Mississippian (St. Louis); Illinois, Iowa: (Salem); Indiana.

Orodus ornatus Newb. and Worth.

Hay, O. P. 1902 A, 295.
Savage, T. E. 1902 A, 262 (O. ornatissimus).
Mississippian (Keokuk); Illinois, Iowa.

Orodus? parallellus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (Kinderhook); Iowa.

Orodus parvulus St. John and Worth.

Hay, O. P. 1902 A, 295.
Mississippian (St. Louis); Illinois.

Orodus plicatus Newb. and Worth.

Hay, O. P. 1902 A, 296.
Mississippian (St. Louis); Missouri.

Orodus ramosus Agassiz.

Hay, O. P. 1902 A, 296.
Brongniart, C. 1888 C, 47.
Hussakof, L. 1908 A, 32.
Worthen, A. H. 1866 A, 115 (O. multicarinatus).
Mississippian (Kinderhook); Indiana: Waverly); Michigan.

Orodus simplex Branson.

Branson, E. B. 1906 A, 1392, pl. xlii, figs. 25, 26.
Mississippian (Salem); Indiana.

Orodus tuberculatus Newb. and Worth.

Hay, O. P. 1902 A, 296.
Mississippian (Burlington); Illinois, Iowa.

Orodus turgidus St. John and Worth.

Hay, O. P. 1902 A, 296.
Mississippian (Chester); Illinois.

Orodus variabilis Newb.

Hay, O. P. 1902 A, 296.
Newberry, J. S. 1874 G, 94, 98.
Mississippian (Waverly); Ohio, Kentucky.

Orodus variocostatus St. John and Worth.

St. John and Worthen 1875 A, 304, pl. vii, figs. 1-9.
Hay, O. P. 1902 A, 296.
Mississippian (Burlington); Illinois, Iowa.

EOÖRODUS Branson. Type *E. typus* Branson.

Branson, E. B. 1914 A, 68.
Jordan, D. S. 1923 A, 95.

Eoörodus typus Branson.

Branson, E. B. 1914 A, 68, pl. iv, figs. 22-24.
Upper Devonian (Craghead); Missouri.

LEIODUS St. John and Worth. Type *L. calcaratus* St. John and Worth.

Hay, O. P. 1902 A, 296.
1901 B, 67.
Jordan, D. S. 1923 A, 95.

Leiodus calcaratus St. John and Worth.

Hay, O. P. 1902 A, 296.
Mississippian (Burlington); Iowa, Illinois.

Leiodus grossipunctatus St. John and Worth.

Hay, O. P. 1902 A, 296.
Mississippian (Burlington); Iowa, Illinois.

MESODMODUS St. John and Worth. Type *M. exsculptus* St. John and Worth.

Hay, O. P. 1902 A, 297.
1901 B, 67.
Jordan, D. S. 1923 A, 95.

Mesodmodus explanatus St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (Kinderhook); Iowa.

Mesodmodus exsculptus St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (Kinderhook); Iowa.

Mesodmodus ornatus St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (Burlington); Iowa, Illinois.

DESMIODUS St. John and Worth. Type *D. tumidus* St. John and Worth.

Hay, O. P. 1902 A, 297.
1901 B, 67.
Jordan, D. S. 1923 A, 95.

Desmiodus costelliferus St. John and Worth.

Hay, O. P. 1902 A, 297.
Branson, E. B. 1906 A, 1392 (D. costelliferous).
Mississippian (St. Louis); Illinois, Missouri.

Desmiodus? flabellum St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (Keokuk); Missouri.

Desmiodus? ligoniformis St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (Keokuk); Missouri, Iowa.

Desmiodus minusculus (Newb. and Worth.).

Hay, O. P. 1902 A, 297.
Mississippian (Keokuk); Illinois.

Desmiodus salemensis Branson.

Branson, E. B. 1906 A, 1392, pl. xlii, figs. 12-14.
Mississippian (Salem); Indiana.

Desmiodus tumidus St. John and Worth.

Hay, O. P. 1902 A, 297.
Mississippian (St. Louis); Illinois, Missouri.

PETRODUS M'Coy, F. Type *P. patelliformis* M'Coy.

Hay, O. P. 1902 A, 297.
Barkas, W. J. 1874 D, 547.
Eastman, C. R. 1903 B, 219.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1923 A, 95.
Woodward, A. S. 1903 A, 488.
Zittel and Koken 1911 A, 63.

Petrodus acutus Newb. and Worth.

Hay, O. P. 1902 A, 297.
Woodward, A. S. 1903 A, 487, fig. 9.
Pennsylvanian; Illinois.

Petrodus buttersi Newberry.

Newberry, J. S. 1889 A, pl. xxvii, fig. 1.
Hussakof, L. 1908 A, 50.
Pennsylvanian; Illinois.

Petrodus occidentalis Newb. and Worth.

Hay, O. P. 1902 A, 298.
Keyes, C. R. 1888 B, 26 (This species?).
1891 A, 332.
Savage, T. E. 1922 A, 238, 240, 246.
Shaw and Savage 1912 A, 7.
Pennsylvanian; Illinois, Indiana, Iowa.

Petrodus? pustulosus Newb. and Worth.

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

STEMMATIAS Hay. Type *Stemmatodus cheiriformis* St. John and Worth.

Hay, O. P. 1902 A, 298.
Eastman, C. R. 1903 B, 219.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1923 A, 95.

Stemmatias bicristatus (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

Stemmatias bifurcatus (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

Stemmatias cheiriformis (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

Stemmatias compactus (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Chester); Illinois.

Stemmatias keokuk (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Keokuk); Illinois, Iowa.

Stemmatias simplex (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

Stemmatias symmetricus (St. John and Worth.).

Hay, O. P. 1902 A, 298.
Mississippian (Burlington); Iowa.

HYBODUS Agassiz. Type *H. plicatilis* Agassiz. See, however, Jordan 1923 A, 95.

Hay, O. P. 1902 A, 299.
Abel, O. 1908 E, 402.
1919 A, 119, fig. 77.
1920 A, 327, 330, fig. 517.
Agassiz, L. 1844 D, 142 ("hybodontes").
Aichel, O. 1919 A, 242.
Alessandri, G. 1910 A, 31.
Andreæ, A. 1900 A, 470 (Hybodus); 471 (Orthohybodus, Parahybodus).
Arldt, T. 1923 A, 487.

Barkas, W. J. 1874 B, 163, figs. 1, 2.
1874 C, 287.
1874 D, 546.
Branca, W. 1908 C, 395.
Bridge, T. W. 1904 A, 445.
Bronn, H. G. 1848 A, 598.
1849 A, 650.
Broom, R. 1909 A, 252, pl. xii, fig. 1.
Case, E. C. 1915 A, 124.
Charlesworth, E. 1839 A, 242, pl. iv.
Coulon, L. 1903 A, 112.
Day, E. C. H. 1865 A, 565.
Dean, B. 1909 C, 249.
Deecke, W. 1926 A, 185.
Dollo, L. 1889 F, 336.
Eastman, C. R. 1902 B, 77.
1911 B, 184.
Egerton, P. G. 1855 A, 8 B, 2.
Evans, H. M. 1923 A, 15, text-fig. 8.
Flower, W. H. 1886 A, 285.
Fürbringer, K. 1904 B, 464.
Fraas, E. 1889 B, 233.
1895 A, 24.
Gervais, P. 1852 A, explan. pls. lxxvii, lxxviii.
1859 A, 525, 526, pls. lxxvii, lxxviii.
Giebel, C. G. 1855 A, 114, pl. xlvii.
Goodrich, E. S. 1908 A, 753.
1909 A, 511.
Hay, O. P. 1901 B, 67, 71 (Hybodus, Parahybodus, Orthohybodus).
Humphreys, J. 1908 A, 11.
Heilprin, A. 1887 A, 300.
Jacobshagen, E. 1923 A, 178.
Jaekel, O. 1898 D, 151.
1903 F, 36.
1906 C, 158.
Jordan, D. S. 1919 B, 186.
1923 A, 95.
Krause, P. G. 1901 A, 120.
Klaatsch, H. 1890 A, 121.
Koken, E. 1893 B, 384.
1904 A, 304.
1907 A, 261, pls. xi-xiv.
Mantell, G. A. 1844 A, 609, fig. 129.
Owen, R. 1845 B, 56, pl. xi, fig. 1.
Philippi and Frech 1903 A, 10, pl. i.
Pompeckj, J. F. 1913 A, 1125, figs. 25, 27.
Priem, F. 1908 B, 3, figs. 1-3, 9.
Regan, C. T. 1906 A, 748.
Reis, O. M. 1894 A, 61.
Ridewood, W. G. 1896 A, 383.
1921 A, 344.
Sauvage, E. 1867 A, 107.
1902 C, 180.
Schlesinger, G. 1909 A, (142).
Schlosser, M. 1917 A, 135, 139.
Schmidt, M. 1921 A, 103, figs. 1, 2.
Stensiö, E. A. 1921 A, 1.
1925 A, 126, fig. 31.
Storms, R. 1891 A, 145.
Stromer, E. 1917 A, 23.
1925 A, 19, 21.
Terra, P. 1911 A, 202, fig. 52.
Traquair, R. H. 1900 C, 505.
Williamson, W. C. 1851 A, 679.
Woodward, A. S. 1891 E, 62, pls. i, ii.
1896 E, 69.
1915 B, lxvii.
1917 C, 541.
1919 A (1916), 3, pls. i-iii; text-figs. 1-5.
1921 A, 179.
1921 B, 30, fig. 1.
1921 C, 179.
1922 C, 70, fig. 68.
1924 B, 340.
Zittel and Koken 1911 A, 53, fig. 89.
Zittel and Schlosser 1923 A, 59, figs. 11, 93, 96.

Hybodus clarkensis Cragin.

Hay, O. P. 1902 A, 299.
Upper Cretaceous ("Neocomian"); Kansas.

Hybodus copei Hay.

Hay, O. P. 1902 A, 299.
Hussakof, L. 1908 A, 31.
Triassic?; Texas.

Hybodus nevadensis Wemple.

Wemple, E. M. 1906 A, 72, pl. vii, fig. 3.
Jordan and Hannibal 1923 A, 30, 61.
Merriam, J. C. 1908 C, 18.
Triassic (Middle); Nevada.

Hybodus polyprion Agassiz.

Hay, O. P. 1902 A, 299.
Cockerell, T. D. A. 1908 C, 161.
Marsh, O. C. 1899 A, 230.
Upper Jurassic (Stonesfield); England: (Morrison); Wyoming.

Hybodus shastensis Wemple.

Wemple, E. M. 1906 A, 73, pl. vii, fig. 4.
Jordan, D. S. 1907 A, 98, fig. 1.
Jordan and Beal 1913 A, 246.
Jordan and Hannibal 1923 A, 30, 61.
Triassic (Upper); California.

Hybodus sp. indet.

Case, E. C. 1915 A, 96.
Hussakof, L. 1911 A, 157, pl. xxx, fig. 5.
Permian (Wichita?, Clear Fork?); Texas.

Acrodus Agassiz. Type *A. gaillardoti* Agassiz.

Hay, O. P. 1902 A, 299.
Agassiz, L. 1844 C, 267.
Alessandri, G. 1910 A, 34.
Ameghino, F. 1906 A, 186.
Andreæ, E. 1900 A, 471.
Barkas, W. J. 1874 D, 544.
Bridge, T. W. 1904 A, 445.
Bronn, H. G. 1848 A, 8.
1849 A, 648.
Coulon, L. 1903 A, 115.
Deecke, W. 1926 A, 185.
Egerton, P. G. 1855 A, 8 B, 2.
Fowler, H. W. 1911 A, 28.
Fraas, E. 1889 B, 233 (Acrodus); 234 (Sphenonchus).
Gervais, P. 1852 A, explan. pl. lxxvii.
1859 A, 525, pl. lxxvii.
Giebel, C. G. 1855 A, 115.

Hay, O. P. 1901 B, 67, 71.
Heilprin, A. 1887 A, 300.
Humphreys, J. 1908 A, 11.
Jordan, D. S. 1905 A, i, 528.
1923 A, 95.
Klaatsch, H. 1890 A, 122.
Koken, E. 1893 B, 384.
Moodie, R. L. 1926 A, 61, 79, 81, pl. ix.
Owen, R. 1845 B, 54, pls. xiv-xvi.
1866 A, 378.
Philippi and Frech 1903 A, 11, pl. i.
Pompeckj, J. F. 1913 A, 1125, fig. 24.
Priem, F. 1908 B, 4.
Reynolds, S. H. 1897 A, 109.
Sauvage, E. 1867 A, 106.
Schlosser, M. 1917 A, 135.
Stensiö, E. A. 1921 A, 8.
Storms, R. 1891 A, 114.
Woodward, A. S. 1915 B, lxvii.
1917 C, 541.
1919 A, (1916), 14.
1922 C, 70, fig. 69.
1924 B, 342.
Zittel and Koken 1911 A, 54.
Zittel and Schlosser 1923 A, 60, fig. 97.

Acrodus alexandræ Wemple.

Wemple, E. M. 1906 A, 71, pl. vii, figs. 5, 6.
Jordan and Hannibal 1923 A, 30, 61.
Merriam, J. C. 1908 C, 18.
Triassic (Middle); Nevada.

Acrodus emmonsi Leidy.

Hay, O. P. 1902 A, 299.
Miocene?; North Carolina.

Acrodus humilis Leidy.

Hay, O. P. 1902 A, 299.
Fowler, H. W. 1911 A, 28, fig. 3.
Upper Cretaceous (Vincentown); New Jersey.

Acrodus oreodontus Wemple.

Wemple, E. M. 1906 A, 72, pl. vii, figs. 1, 2.
Jordan and Hannibal 1923 A, 30, 61.
Merriam, J. C. 1908 C, 18.
Triassic (Middle); Nevada.

Acrodus wempliæ Jordan.

Jordan, D. S. 1907 A, 100, fig. 2.
Jordan and Beal 1913 A, 245, 246.
Jordan and Hannibal 1923 A, 30, 61.
Triassic (Upper); California.

Wodnika Münster. Type *Acrodus althausii* Münster.

Münster, G. 1843, Beitr. Petrefact., 48.
Case, E. C. 1926 B. 196 (Wodnikia).
Jordan, D. S. 1923 A, 95.
Jordan and Gilbert 1919 A, 17, 20.
Schlosser, M. 1917 A, 134.
Woodward, A. S. 1889 D, 248.

Wodnika ocoyæ Jordan and Gilbert.

Jordan and Gilbert 1919 A, 17, 19, pl. vii, fig. 8.
Jordan, D. S. 1923 A, 95 ("Not a tooth but a concretion").
Jordan and Hannibal 1923 A, 32 ("chalcedony concretion").

Strophodus Agassiz. Type *S. reticulatus* Agassiz.

Agassiz, L. 1843 B, (1838), iii, 116.
Coulon, L. 1903 A, 116.
Gervais, P. 1852 A, explan. pl. lxxviii.
1859 A, 526, pl. lxxviii.
Giebel, C. G. 1855 A, 115.
Heilprin, A. 1887 A, 300.
Jordan, D. S. 1923 A, 95.
Nicholson and Lydekker 1889 A, 943 (Syn. of Asteracanthus).
Owen, R. 1869 C, 193, pl. vii.
Pompeckj, J. F. 1913 A, 11-25, fig. 27.
Priem, F. 1911 C, 7, pl. ii.
Sauvage, E. 1867 A, 101.
Woodward, A. S. 1889 D, 307, 314 (Syn. of Asteracanthus).
Woodward, A. S. 1898 B, 46 (Syn. of Asteracanthus).
1922 C, 71, fig. 70.
Zittel and Schlosser 1923 A, 62, figs. 98, 99.

Strophodus shastensis Bryant.

Bryant, H. C. 1914 A, 27, figs. 1, 2.
Jordan and Hannibal 1923 A, 32, 61 (Asteracanthus).
Zittel and Schlosser 1923 A, 62.
Triassic (Upper); California.

Strophodus sp. indet.

Bryant, H. C. 1914 B, 155. Upper Triassic; California.

Palæospinax Egerton. Type *Thyellina prisca* Agassiz.

Egerton, P. G. 1872, Mem. Geol. Surv. Unit. Kingd., Dec. 13, No. 7.
Bridge, T. W. 1904 A, 197, 445.
Davis, J. W. 1881 C, 429, pl. xx.
Dean, B. 1909 C, 254.
Dollo, L. 1889 F, 337.
Egerton, P. G. 1873 A, 420.
Evans, H. M. 1923 A, 15, text-fig. 7.
Goodrich, E. S. 1909 A, 144.
Jaekel, O. 1898 D, 152.
Jordan, D. S. 1905 A, i, 528.
Jordan, D. S. 1923 A, 96.
Koken, E. 1907 A, 271.
Lambe, L. M. 1918 B, 27.
Nicholson and Lydekker 1889 A, 943.
Pompeckj, J. F. 1913 A, 1126.
Regan, C. T. 1906 A, 723 (To Palæospinacinæ).
Sternberg, C. M. 1926 A, 104.
Storms, R. 1891 A, 144.
Woodward, A. S. 1889 D, xvii, 321.
1898 B, 46.
1915 B, lxix.

Zittel, K. A. 1890 A, 87.
Zittel, Eastman, etc. 1902 A, 29.
Zittel and Koken 1911 A, 56.
Zittel and Schlosser 1923 A, 62.

Palæospinax ejuncidus Lambe.

Lambe, L. M. 1918 B, 27, figs.
Upper Cretaceous (Edmonton); Alberta.

SYNECHODUS Woodward. Type *Hybodus dubrisiensis* Mackie.

Woodward, A. S. 1888 I, 288.
Chapman, F. 1918 A, 5, 31, pl. v, figs. 11, 13.
Eastman, C. R. 1901 B, 102.
Jordan, D. S. 1923 A, 96.
Leriche, M. 1902 A, 29.
Priem, F. 1908 B, 59, 77, figs. 20, 34-37.
1911 C, 14, 22, text-figs. 1, 2, 10, 11.
Schlosser, M. 1917 A, 139, 141.
Storms, R. 1891 A, 144.
Woodward, A. S. 1889 D, 325, fig. 12.
1891 E, 65, pl. ii.
1896 E, 70.
1898 B, 46, fig. 36.
1912 A, (1911), 216, pls. xlv, xlvi.
Zittel and Schlosser 1923 A, 62.

Synechodus clarkii Eastman.

Eastman, C. R. 1901 B, 103, pl. xiv, figs. 5*a*, 5*b*, 5*c*.
Clark and Miller 1912 A, 117, 118.
Leriche, M. 1902 A, 30 (S. clarki).
Miller, B. L. 1911 A, 103.
1912 A, 2 (S. clarki).
Shattuck, Miller and Bibbins 1907 A, 5.
Eocene (Aquia); Maryland.

Synechodus sp. indet.

Dumble, E. T. 1920 A, 175 (Synecodus).
Eocene (Jackson); Texas.

EDESTOIDÆ, new name.

EDESTIDÆ Jaekel.

Jaekel, O. 1899 A, 298.
Abel, O. 1908 D, (208) ("edestiden").
1912 F, 569 ("edestiden").
1919 A, 136.
Eastman, C. R. 1900 F, 579.
1917 A, 269.
Fuchs, T. 1900 A, 5 ("edestiden").
Goodrich, E. S. 1909 A, 147.
Gregory, W. K. 1907 D, 446.
Jaekel, O. 1900 A, 148 ("edestiden").
1911 A, 56.
Jordan, D. S. 1923 A, 96.
Karpinsky, A. P. 1902 A, 205.
1911 A, 1105 ("édestides").
Karpinsky, A. P. 1912 A, 69.
1915 A, 123 ("édestides").
1922 B, 379.
Klaatsch, H. 1901 A, 435 ("edestiden").
Pompeckj, J. F. 1913 A, 1126.
Sauvage, H. E. 1901 D, 69 ("edestiden").
Schlosser, M. 1917 A, 134 ("edestiden").
Stromer, E. 1905 A, 132 ("edestiden").
1912 A, 22.
Woodward, A. S. 1902 E, 230 ("édestides").
1924 A, 111, 112.
Zittel and Koken 1911 A, 58.
Zittel and Schlosser 1923 A, 63.

CAMPODUS Koninck. Type *C. agassizianus* Koninck.

Hay, O. P. 1902 A, 296.
Abel, O. 1912 F, 489, 567.
Barkas, W. J. 1874 D, 545 (Campodus); 547 (Lophodus).
Brongniart, C. 1888 C, 48.
Bronn, H. G. 1848 A, 208.
Eastman, C. R. 1901 A, 795.
1902 B, 56, 57, 70; pls. 1-3.
1902 E, 852.
1902 F, 267.
1902 H, 150, 151.
1903 B, 184.
1903 D, 285.
1905 C, 405.
1917 C, 214.
Eastman, Gregory and Matthew 1917 A, 117.
Hay, O. P. 1901 B, 67, 70.
1909 C, 58.
1912 A, 36.
Jordan, D. S. 1923 A, 95.
Karpinsky, A. P. 1903 A, 32, figs. 2-5.
1922 B, 379.
1925 A, 128.
Mudge, B. F. 1875 A, 122 (Agazodus).
Pompeckj, J. F. 1913 A, 1126.
Raymond, P. E. 1925 B, 554.
Stevenson, J. J. 1907 A, 168 (Lophodus).
Schlosser, M. 1917 A, 133.
Stromer, E. 1905 A, 133.
Van de Wiele, C. 1902 A, 246.
Woodward, A. S. 1917 F, 3, pl. 1, figs. 8-10.
1921 B, 34.
1924 A, 112.
Zittel and Koken 1911 A, 57.
Zittel and Schlosser 1923 A, 63.

Campodus basalis (Cope).

Hay, O. P. 1902 A, 296.
Pennsylvanian; Illinois.

Campodus corrugatus (Newb. and Worth.).

Hay, O. P. 1902 A, 296.
Branson, E. B. 1916 A, 644, pl. iii, figs. 1-6.
Eastman, C. R. 1902 E, 853, 854; fig. 2.
Mason, S. C. 1883 A, 13 (Agassizodus).
Pennsylvanian; Illinois, Kansas, Wyoming.

Campodus scitulus (St. John and Worth.).

Hay, O. P. 1902 A, 296.
Eastman, C. R. 1902 B, 97.
1902 G, 540.
1903 B, 194.
Pennsylvanian (Mazon Creek); Illinois.

Campodus variabilis (Newb. and Worth.).

Hay, O. P. 1902 A, 296.
Abel, O. 1912 F, 491, fig. 373.
Eastman, C. R. 1902 B, 57, pls. i-iii; text-fig. 2.
1902 D, 659.
1902 E, 854.
1903 B, 184, pl. i, fig. 1, pl. ii, figs. 15, 16; text-fig. 10.
1903 D, 283.
1905 C, 406.
Hussakof, L. 1908 A, 43.
Karpinsky, A. P. 1903 A, 33.
1922 B, 383.
Karpinsky, A. P. 1925 A, 128, figs. 1, 10, 12.
Pompeckj, J. F. 1913 A, 1126, fig. 28.
Raymond, P. E. 1925 B, 554.
Smith, G. L. 1915 A, 282 (Agassizodus).
Springer, F. 1924 A, 234 (Agassizodus).
Van de Wiele, C. 1902 A, 246.
Woodruff, E. G. 1906 A, 288, 290, pl. xviii, fig. 1.
Woodward, A. S. 1917 F, 4, figs. A, B.
1924 B, 342.
Zittel and Koken 1911 A, 57, figs. 97, 98.
Zittel and Schlosser 1923 A, 63, fig. 102.
Subcarboniferous; Belgium: Pennsylvanian (Missourian); West Virginia, Iowa, Kansas, Illinois, Iowa, Nebraska.

Campodus virginianus (St. John and Worth.).

Hay, O. P. 1902 A, 297.
Pennsylvanian; West Virginia.

Campodus sp. indet.

Branson, E. B. 1916 A, 645, pl. ii, figs. 21, 21*a*.
Pennsylvanian (Embar); Wyoming.

Scoliorhiza Raymond. Type *S. kellyi* Raymond.

Raymond, P. E. 1925 B, 555.

Scoliorhiza kellyi Raymond.

Raymond, P. E. 1925 B, 555, fig. 2.
Triassic (Upper Banff); Alberta.

Scoliorhiza whitei (St. John and Worth.).

Hay, O. P. 1902 A, 296 (Orodus).
Raymond, P. E. 1925 B, 554, 555 (Orodus, Scoliorhiza).
Mississippian (Kinderhook); Iowa, Mississippian? (Upper Banff limestone); Alberta.

Edestus Leidy. Type *E. vorax* Leidy.

Hay, O. P. 1902 A, 337.
Abel, O. 1912 F, 567.
Barkas, W. J. 1874 D, 546 (Edestes).
Dean, B. 1912 A, 227.
Eastman, C. R. 1900 F, 580.
1901 A, 795.
1902 B, 55, 64, 70.
1902 D, 658.
1902 F, 267.
1902 H, 148, 151.
1903 B, 185.
1903 D, 281, 286.
1905 C, 405.
1912 C, 657.
1917 A, 269.
1917 C, 214.
Eastman, Gregory and Matthew 1917 A, 117.
Fuchs, T. 1900 A, 5.
Goodrich, E. S. 1909 A, 147.
Hay, O. P. 1907 A, 23.
1909 C, 43, 50, 57.
1912 A, 31.
Jaekel, O. 1901 A, 557 ("edestiden").
Jordan, D. S. 1905 A, i, 529.
1910 B, 186.
1919 B, 272.
1923 A, 96.
Karpinsky, A. P. 1902 A, 207.
1911 A, 1113.
1912 A, 72.
Karpinsky, A. P. 1915 A, 125.
1916 A, 701.
1922 B, 379.
1925 A, 128, fig. 7.
Kemna, A. 1902 A, 234.
Lydekker, R. 1910 F, 675.
1913 A, 24.
Missuna, A. 1908 A, 529.
Moodie, R. L. 1913 A, 188.
Newton, E. T. 1904 A, 1.
1917 A, 6.
Pompeckj, J. F. 1913 A, 1126.
Priem, F. 1900 B, 122.
Renevier, E. 1900 A, vi.
Sauvage, H. E. 1901 D, 69.
Van de Wiele, C. 1902 A, 244.
Woodward, A. S. 1890 F, 147.
1900 F, 34.
1902 E, 232.
1915 B, lxvi.
1917 F, 1, 6, pl. i.
1924 A, 110, fig. 3.
Zittel and Koken 1911 A, 58.
Zittel and Schlosser 1923 A, 63.

Edestus crenulatus Hay.

Hay, O. P. 1909 C, 43, pl. xii, figs. 1-3, text figs. 1, 2.
Abel, O. 1912 F, 567, fig. 439.
1920 A, 331, fig. 524.

Hay, O. P. 1912 A, 35.
Karpinsky, A. P. 1911 A, 1107.
1912 A, 72.
1922 B, 381, 384, figs. 6, 7.
1925 A, 130, fig. 7.
Pompeckj, J. F. 1913 A, 1127, fig. 29.
Zittel and Koken 1911 A, 58, fig. 99.
Zittel and Schlosser 1923 A, 64, fig. 103.
Pennsylvanian; Illinois?

Edestus giganteus Newb.

Hay, O. P. 1902 A, 337.
Eastman, C. R. 1902 B, 72, fig. 6*c*.
Hussakof, L. 1908 A, 46.
Karpinsky, A. P. 1902 A, 207, fig. 5.
1911 A, 1113.
1912 A, 81.
1916 A, 708.
1925 A, 136.
Newberry, J. S. 1889 A, 225, pl. xl.
Priem, F. 1900 B, 121, fig. 2.
Pennsylvanian; Illinois.

Edestus heinrichsii Newb. and Worth.

Hay, O. P. 1902 A, 337.
Eastman, C. R. 1902 B, 65, 66, 72; figs. 6*a*, 7 (E. heinrichi).
1902 D, 659 (E. heinrichi).
1903 D, 288 (E. heinrichi).
1905 C, 406 (E. heinrichi).
1917 A, 269, pl. vi, fig. 1 (E. heinrichi).
Hay, O. P. 1909 C, 43, pl. xiii, figs. 1, 2, 3 (E. heinrichii).
1912 A, 35, 37 (E. heinrichi).
Hussakof, L. 1908 A, 47 (E. heinrichsi).
Jaekel, O. 1900 A, 145.
Karpinsky, A. P. 1902 A, 206, fig. 4 (E. heinrichsi).
1911 A, 1107 (E. heinrichi).
1912 A, 72.
1922 B, 380 (E. heinrichi).
Misuna, A. 1908 A, 533, fig. 3 (E. heinrichi).
St. John, O. 1902 A, 658 (E. heinrichi).
Pennsylvanian; Illinois, Indiana, Iowa.

Edestus minor Newb.

Hay, O. P. 1902 A, 337.
Eastman, C. R. 1902 B, 65, 66, 72.
1902 D, 654, 659, fig. 3.
1902 H, 148.
1903 D, 288, pl. xxi, figs. 2, 3.
Hay, O. P. 1909 C, 48, text-fig. 6.
1912 A, 36.
Hussakof, L. 1908 A, 47.
Hussakof and Bryant 1919 A, 163.
Karpinsky, A. P. 1902 A, 205, figs. 1, 2.
1911 A, 1113.
1912 A, 80.
1922 B, 380, 384.
Newton, E. T. 1904 A, 2, fig. 1.
St. John, O. 1902 A, 658, fig. 3 (E. vorax).
Woodward, A. S. 1917 F, 4, fig. D.
Pennsylvanian; Indiana.

Edestus mirus Hay.

Hay, O. P. 1912 A, 31, 36, pls. i, ii.
Karpinsky, A. P. 1915 A, 124, fig. 2.
1916 A, 707.
1922 B, 386, fig. 11.
Woodward, A. S. 1917 F, 3.
1924 A, 111, fig. 4.
Pennsylvanian; Iowa.

Edestus serratus Hay.

Hay, O. P. 1909 C, 47, pl. xii, fig. 4, text-figs. 3, 4.
Karpinsky, A. P. 1911 A, 1114.
1912 A, 82.
Pennsylvanian; Illinois?

Edestus vorax Leidy.

Hay, O. P. 1902 A, 337.
Collett, J. 1872 A, 203.
Eastman, C. R. 1902 B, 75, fig. 6*b*.
1902 D, 659.
Hay, O. P. 1912 A, 35.
Karpinsky, A. P. 1902 A, 205.
1912 A, 81.
1916 A, 708.
Pennsylvanian; Arkansas.

TOXOPRION Hay. Type *Edestus lecontei* Dean.

Hay, O. P. 1909 C, 56, 57.
Abel, O. 1912 F, 567, 568.
Eastman, C. R. 1903 D, 286 (Campyloprion).
Hay, O. P. 1912 A, 31.
Jordan, D. S. 1923 A, 96.
Karpinsky, A. P. 1912 A, 86.
1922 B, 385.
Lydekker, R. 1910 F, 676.
Pompeckj, J. F. 1913 A, 1126.
Zittel and Schlosser 1923 A, 63.

Toxoprion lecontei Dean.

Hay, O. P. 1902 A, 337 (Edestus).
Eastman, C. R. 1900 F, 580 (Edestus).
Eastman, C. R. 1902 B, 65, 66 (Campyloprion).
1903 D, 286 (Campyloprion).
Hay, O. P. 1907 A, 23 (Edestus).
1909 C, 52 (Edestus).
Jaekel, O. 1900 A, 147 (Edestus).
Karpinsky, A. 1902 A, 208, fig. 6 (Edestus lecomtei).
1912 A, 82, fig. 3 (Edestus).
1915 A, 125 (Edestus).
1922 B, 385.
1925 A, 135.
Sauvage, H. E. 1899 A, 4 (Edestus).
Pennsylvanian; Nevada.

CAMPYLOPRION Eastman. Type *C. annectans* Eastman.

Eastman, C. R. 1902 H, 148, 151.
Eastman, C. R. 1902 B, 56, 64, 70.
1903 B, 185.
1903 D, 283, 286.
Hay, O. P. 1907 A, 23.
1909 C, 56.
Jordan, D. S. 1905 A, i, 529.
1923 A, 96.

Karpinsky, A. P. 1911 A, 1117.
1912 A, 86 (Syn. of Helicoprion).

Campyloprion annectans Eastman.

Eastman, C. R. 1902 H, 151, pl. viii, fig. 2; text-fig. 3.
1902 B, 65, 66, pl. iv, text-figs. 3, 4.
Eastman, C. R. 1903 D, 286, pl. xxi, fig. 1.
Hay, O. P. 1909 C, 56.
Karpinsky, A. P. 1912 A, 82.
Van de Wiele, C. 1902 A, 246.
North America; Locality and geological age unknown.

HELICOPRIONIDÆ Karpinsky.

Karpinsky, A. P. 1911 A, 1113.

HELICOPRION Karpinsky. Type *H. bessonowi* Karpinsky.

Karpinsky, A. P. 1899 A.
Abel, O. 1904 B, 745.
1908 D, (208).
1912 F, 567, fig. 440.
1919 A, 139, fig. 102.
1920 A, 331, fig. 525.
Eastman, C. R. 1900 F, 580.
1901 A, 795.
1901 H, 151.
1902 B, 56.
1903 B, 185.
1903 D, 282, 286.
1905 C, 405.
1913 B, 677.
1917 B, 655.
Eastman, Gregory and Matthew 1917 A, 117.
Fuchs, H. 1900 A, 5.
Goodrich, E. S. 1909 A, 147, fig. 108.
Hay, O. P. 1907 A, 23.
1909 C, 50.
1912 A, 31.
Jaekel, O. 1900 A, 145.
Jordan, D. S. 1905 A, i, 529; ii, 574.
1920 B, 487.
1923 A, 96.
Karpinsky, A. P. 1902 A, 205, pl. C, text-figs. 7-9.
1911 A, 1105, figs. 1-5.
1912 A, 69, fig. 2.
1915 A, 117.
Karpinsky, A. P. 1916 A, 701.
1922 A, 369, figs. 1-3.
1922 B, 379.
1925 A, 127, figs. 5, 6.
Kemna, A. 1902 A, 233.
Klaatsch, H. 1901 A, 429.
Koken, E. 1901 A, 225, fig. 1.
Newton, E. T. 1917 A, 6.
Pompeckj, J. F. 1913 A, 1127, fig. 29.
Priem, F. 1900 B, 121, figs. 1, 3.
Renevier, E. 1900 A, vi.
Sauvage, H. E. 1901 D, 69.
Schlosser, M. 1917 A, 134.
Schoenichen, W. 1900 A, 503.
Simoens, G. 1902 A, 235, figs. 2, 3, 6.
Van den Broeck, E. 1902 A, 215.
Van de Wiele, C. 1902 A, 245.
Woodward, A. S. 1900 F, 33.
1902 A, 230.
1904 C, 189, fig. 3.
1915 B, lxvi.
1917 D, 6.
1921 B, 34.
1922 C, 68, fig. 65.
1924 A, 111, 112, fig. 4.
Zittel and Broili 1911 A, 59.
Zittel and Schlosser 1923 A, 63, fig. 104.
No species of this genus is yet known from N. America.

LISSOPRION Hay. Type *L. ferrieri* Hay.

Hay, O. P. 1907 A, 23.
Abel, O. 1912 F, 567.
1919 A, 139.
Hay, O. P. 1909 C, 52, 57.
Jordan, D. S. 1923 A, 96.
Karpinsky, A. P. 1911 A, 1117.
1912 A, 92.
Lydekker, R. 1910 F, 676.
Pompeckj, J. F. 1913 A, 1126.
Zittel and Koken 1911 A, 59.
Zittel and Schlosser 1923 A, 64.

Lissoprion ferrieri Hay.

Hay, O. P. 1907 A, 22, fig.
Abel, O. 1912 F, 568.
Hay, O. P. 1909 C, 52, pls. xiv, xv, text-fig. 7.
Hussakof, L. 1908 A, 49.
Karpinsky, A. P. 1911 A, 1118, figs. 5, 6.
1912 A, 82, figs. 4-6.
Lambe, L. M. 1917 E, 294.
Permo-carboniferous; Idaho.

Lissoprion sp. indet.

Lambe, L. M. 1917 E (This genus?).
Upper Pennsylvanian (Banff); Alberta.

Superfamily HEXANCHOIDÆ, new norm.

Hay, O. P. 1902 A, 300 (Hexanchoidea).
Arldt, T. 1923 A, 483 ("notidanoiden").
Fowler, H. W. 1911 A, 23 (Notidani).
Garman, S. 1913 A, 11 (Hexanchoidei).
Gill, T. 1882 A, 967 (Opistharthri).
Gill, T. 1885 A, lxiv (Opistharthri).
1905 A, 657 (Diplospondyli, Opisarthri).
Goodrich, E. S. 1909 A, 139 (Notidani).
Gregory, W. K. 1907 D, 440 (Diplospondyli).
Jaekel, O. 1911 A, 61 (Notidani).

Pompeckj, J. F. 1913 A, 1124 (Notadanoidei).
Jordan, D. S. 1905 A, i, 523; ii, 583 (Notidani).
1907 B, 184 (Notidani).
1923 A, 97 (Notidani, Opistharthri).
Parker and Haswell 1897 A, 156 (Protoselachii).
Regan, C. T. 1906 A, 722, 739 (Notidanoidei); 740 (Hexanchoidei).
Rauther, M. 1913 A, 1097 (Notidanoidei).
Reynolds, S. H. 1897 A, 549 (Notidanidæ).
Ridewood, W. G. 1921 A, 313, 315 (Notidanoidei).
Stannius, H. 1854 A (Notidani).
Van Wijhe, J. W. 1922 A, 291 (Notadanoidei).
Versluys, J. 1922 B, 95 (Notidani).
Zittel and Woodward 1902 A, 25 (Diplospondyli).

HEXANCHIDÆ Gill.

Unless otherwise indicated, the authors, as cited, use for this family the name Notidanidæ.

Hay, O. P. 1902 A, 300 (Hexanchidæ).
Abel, O. 1919 A, 120.
Allis, E. P. 1913 A, 323.
1922 A, 152.
1923 A, 47.
1923 B, 167.
Arldt, T. 1907 D, 283.
1923 A, 483 ("hexanchiden").
Beer, G. R. 1926 A, 275 (Notidani).
Bonaparte, C. L. 1840 A, 45 (Notidani).
Braus, H. 1901 A, 180 ("notidaniden").
1904 A, 414 ("notidaniden").
1906 B, 557 ("notidaniden").
Bridge, T. W. 1904 A, 442.
Chapman, F. 1918 A, 4.
Cope, E. D. 1891 N, 17 (Hexanchidæ).
Cunningham, J. T. 1912 A, 246.
Daniel, J. F. 1916 A, 349 ("notidanid sharks").
Dollo, L. 1904 C, 48.
Duméril, A. 1856 A, 133 (Notidani).
Filatoff, D. 1907 A, 309.
Fitzinger, L. J. 1873 A, 56 (Notidani).
Fowler, H. W. 1911 A, 23 (Hexanchidæ).
Fuchs, H. 1907 C, 27 ("notidaniden").
Fürbringer, K. 1903 A, 361.
Garman, S. 1913 A, 2, 11 (Hexeptranchidæ).
Gaupp, E. 1898 B, 860 ("notidaniden").
1905 D, 868 ("notidaniden").
Gegenbaur, C. 1870 C, 402 ("notidaniden").
Gill, T. 1905 A, 658 (Hexanchidæ).
Goodey, T. 1910 A, 550, 560.
Goodrich, E. S. 1909 A, 143.
Haswell, W. A. 1884 A, 112.
Hay, O. P. 1901 B, 67 (Hexanchidæ).
Hilzheimer, M. 1913 A, 469.
Hoernes, R. 1886 A, 541.
Huber, O. 1901 A, 600.
Koken, E. 1904 A, 305 ("notidaniden").
Imms, A. D. 1905 A, 44.
Jordan, D. S. 1905 A, i, 524; ii, 574 (Hexanchidæ).
1907 B, 185, 758 (Hexanchidæ).
1923 A, 97 (Hexanchidæ).
Jordan and Gilbert 1882 A, 34, 62.
Kingsley, J. S. 1885 A, 74 (Notidanidæ, Hexanchidæ).
Krall, A. 1908 A, 529 (Hexanchidæ).
Lakjer, T. 1927 A, 281.
Lawley, R. 1877 A, 62 (Squalidi).
Leigh-Sharpe, W. H. 1926 A, 338
Leunis and Ludwig 1883 A, 786.
Mayer, P. 1886 A, 273, 274.
Meek, A. 1916 A, 41 (Hexanchidæ).
Osburn, R. C. 1907 A, 425.
Parker and Haswell 1897 A, 156.
Rauther, M. 1913 A, 1098.
Regan, C. T. 1906 A, 722, 741 (Hexanchidæ).
Ridewood, W. G. 1921 A, 313, 348, 394.
Schlosser, M. 1917 A, 137, 139, 141, 145 ("notidaniden").
Schmalhausen, J. J. 1913 A, 24.
Sewertzoff, A. N. 1923 A, 399 ("notidaniden").
1923 B.
Stromer, E. 1912 A, 19.
Tims, H. W. M. 1903 A, 133.
Versluys, J. 1922 B, 100 (Notidani).
Wallace, A. R. 1876 A, ii, 461.
Woodward, A. S. 1921 B, 37.
Zittel and Koken 1911 A, 49.
Zittel and Schlosser 1923 A, 54.
Zittel and Woodward 1902 A, 25.

HEPTRANCHIAS Rafinesque. Type *Squalus cinereus* Gmelin.

Hay, O. P. 1902 A, 300.
Allis, E. P. 1909 A, 202 (Heptanchus).
1913 A, 325 (Hexanchus, Heptanchus).
1914 A, 361 (Hexanchus, Heptanchus).
1915 A (Hexanchus, Heptanchus).
1919 C, 257 (Heptanchus).
1922 B, 261 (Heptanchus).
1923 A, 41 (Hexanchus, Heptanchus).
1923 B (Hexanchus, Heptanchus).
Ameghino, F. 1906 A, 186 (Notidanus).
Anthony, R. 1913 A, 243 (Hexanchus).
Baehr, W. B. 1906 A, 630 (Heptanchus, Hexanchus).
Bardeleben, K. 1906 A, 138 (Hexanchus).
Bassani, F. 1901 A, 175 (Notidanus).
Bassani, F. 1891 A, 42 (Notidanus).
1901 B, 175, pls. xxii-xxiv.
Beer, G. R. 1926 A, 276 (Heptanchus).
Braus, H. 1904 A, 393, 418, figs. 5, 10, 11, 13 (Heptanchus).
1906 A, 225 (Heptanchus).
1906 B, 545, fig. 1 (Heptanchus).
1907 A, 249 (Hexanchus, Heptanchus).
Bridge, T. W. 1904 A, 443, 748 (Notidanus).
Briquel, P. 1898 A, 13 (Heptanchus).
Bronn, H. G. 1848 B, 817 (Notidanus).
1849 A, 641 (Notidanus).
Carter, J. T. 1905 A, 133 (Heptanchus).
Chapman, F. 1918 A, 4 (Notidanus).
Collinge, W. E. 1894 A, 503 (Heptanchus).

Cope, E. D. 1891 N, 16, fig. 7 (Hexanchus).
Daniel, J. F. 1916 A, 349, pls. xxvii-xxix, text-figs. A-H (Heptanchus).
1922 A, many figures (Hexanchus, Heptanchus).
Davidoff, M. 1879 A (Heptanchus).
Dohrn, A. 1884 A, 142 (Hexanchus).
Drüner, L. 1906 A, 7 (Heptanchus).
Duméril, A. 1856 A, 123 ("griset").
Eastman, C. R. 1904 H, 77.
Edgeworth, F. H. 1925 A, 234.
1926 A, 177, 189, fig. 3 (Heptanchus, Hexanchus).
Eimer, G. H. T. 1901 A, 254 (Heptanchus).
Fahrenholz, C. 1915 A, 396, figs. 1-3 (Heptanchus).
Fowler, H. W. 1911 A, 24.
Frassetto, F. 1915 A, 45, figs. 26, 58 (Eptanchus).
Fürbringer, K. 1903 A, 361 (Heptanchus, Hexanchus).
1904 B, 465, figs. 11, 14, 15 (Heptanchus).
Garman, S. 1913 A, 21.
Gaupp, E. 1898 B, 811, 857 (Hexanchus, Heptanchus).
1905 D, 877, fig. 4 (Hexanchus, Heptanchus).
1913 A, 8, fig. 1 (Heptanchus).
Gegenbaur, C. 1870 C, 402 (Heptanchus).
1871 B, 497, pl. xiii (Hexanchus).
Gibian, A. 1912 A, 61 (Heptanchus).
Giebel, C. G. 1855 A, 115 (Notidanus).
Goodey, T. 1910 A, 545 (Heptanchus).
Goodrich, E. S. 1901 A, 312, fig. A (Heptanchus).
1909 A, 511, figs. (Heptanchus, Hexanchus, Notidanus).
Gregory, W. K. 1904 A, 55 (Notidanus); '64, pl. i, fig. 4 (Heptanchus).
Hanson, F. B. 1919 B, 45, fig. 1 (Hexanchus).
Haswell, W. A. 1885 B, 381, pl. x (Heptanchus).
Hawkes, O. A. M. 1905 A, 81 (Heptanchus, Hexanchus).
Hay, O. P. 1901 B, 67 (Hexanchus).
Heilprin, A. 1887 A, 297, 300 (Notidanus).
Hoffman, L. 1912 A, 280 (Hexanchus, Heptanchus).
Huber, O. 1901 A, 600, pl. xxvii (Hexanchus).
Huxley, T. H. 1876 E, 105 (Hexanchus, Heptanchus, Notidanus).
Imms, A. D. 1905 A, 44 (Heptanchus).
Jaekel, O. 1906 A, 9, fig. 1 (Heptanchus).
1911 A, 62, figs. 64-66 (Notorhynchus).
Jordan, D. S. 1905 A, I, 542; II, 574 (Heptranchias, Hexanchus).
1907 B, 185 (Heptranchias, Hexanchus).
1910 B, 181.
1917 A, 78.
1923 A, 97 (Hexanchus, Heptranchiás, Heptanchus).
Jordan and Evermann 1917 A, 78 (Heptranchias, Hexanchus).
Jordan and Gilbert 1882 A, 34, 62.
Jordan and Hannibal 1923 A, 32 (Heptranchias, Hexanchus, Notorhynchus).
Kiaer, J. 1924 A, 89 (Hexanchus, Heptanchus).
Kingsbury, B. F. 1926 A, 85, 105 (Heptanchus, Hexanchus).
Kingsley, J. S. 1894 A, 637 (Hexanchus).
Kingsley, J. S. 1896 A, 142 (Heptanchus).
1912 B, 65, fig. 64 (Heptanchias).
1925 A, 65, 87, 234, figs. 69, 90, 238, 247 (Heptanchus); 221 (Hexanchus).
Klaatsch, H. 1890 A, 110 (Hexanchus).
Krall, A. 108 A, 529 (Heptanchus, Hexanchus).
Lahille, F. 1913 A, 25, pls. viii, ix, text-figs. 1-3.
Lakjer, T. 1927 A, 278 (Notidanus).
Lawley, R. 1875 B, 57-76, pls. i-iv.
Leigh-Sharpe, W. H. 1926 A, 338 (Notidanus, Hexanchus).
Leriche, M. 1902 B, 101 (Notidanus).
1905 A, 110.
1906 C, 418 (Notidanus).
1910 D, 254, fig. 70 (Notidanus).
Leunis and Ludwig 1883 A, 786 (Notidanus).
Leydig, F. 1852 A, 1.
Luther, A. 1909 A, 10, fig. 6 (Heptanchus).
Miklouho-Maclay, N. 1879 A, 321 (Notidanus).
Miner, R. W. 1925 A, 195 (Hexanchus, Heptanchus).
Mivart, St. G. 1878 B, 311, 331 (Notidanus).
Müller and Henle 1837 A, 398 (Hexanchus, Heptanchus).
1838 A, 88 (Notidanus).
Norman, E. W. 1926 A, 441, fig. 55 (Heptanchus).
Osburn, R. C. 1907 A, 421 (Heptanchus).
1907 B, 182 (Notidanus).
Owen, R. 1845 B, 29 (Notidanus).
1848 B, 96 (Heptanchus).
1866 A, 37 (Heptanchus).
Parker and Bettany 1877 A, 89 (Notidanus).
Parker and Haswell 1897 A, 161, fig. 789 (Hexanchus).
Pompeckj, J. F. 1913 A, 1124 (Heptanchus, Hexanchus).
Priem, F. 1908 B, 25, 94 (Notidanus).
Probst, J. 1886 B, 303 (Hexanchus, Heptanchus).
Rabinerson, A. 1925 A, 560, fig. 1 (Heptanchus).
Rabl, C. 1892 A, 106 (Hexanchus).
1901 A, 477, figs. 4, 17 (Heptanchus).
Rauther, M. 1913 A, 1063, figs. 7, 11 (Heptanchus).
Regan, C. T. 1906 A, 722 (Hexanchus, Heptranchias).
Reis, O. M. 1893 A, 501 (Notidanus).
Reynolds, S. H. 1897 A, 31, 63, 114, 121, fig. 17 (Heptanchus); 31, 63, 121 (Hexanchus).
Ridewood, W. G. 1895 B, 429 (Notidanus).
1896 A, 382, fig. 3 (Notidanus).
1899 A, 49 (Heptanchus).
1921 A, 326, 348, 394, figs. 5, 6 (Hexanchus).
Roth, W. 1911 A, 531 (Hexanchus, Heptanchus).
Sagemehl, M. 1884 A, 100 (Heptanchus).
Sauvage, E. 1867 A, 118 (Notidanus).
Schmalhausen, J. J. 1912 A, 580 (Heptanchus).
Secerov, S. 1911 A, 8, pl. i (Heptanchus).
Semon, R. 1901 B, 132 (Heptanchus).
Sewertzoff, A. N. 1923 B, fig. 2 (Heptanchus, Hexanchus).
1926 B, 577 (Heptanchus).
Smith, H. M. 1916 A, 349, fig. (Hexanchus).
Steinhard, O. 1903 A, 6 (Heptanchus).
Stensiö, E. A. 1925 A, 70, 127 (Heptanchus).
1925 B, 140 (Heptranchus).

Stromer, E. 1925 A, 19 (Hexanchus, Heptanchus).
VanWijhe, J. W. 1905 B, 320 (Heptanchus).
Versluys, J. 1922 B, figs. 1, 4, 5, 7 (Heptranchus, Hexanchus).
White, P. J. 1895 B, 222, figs. 1, 2.
1905 A, 320 (Heptanchus).
Winckler, T. C. 1876 A, 12 (Notidanus).
Woodward, A. S. 1889 I, 6 (Notidanus).
1891 E, 65 (Notidanus).
1912 A (1911), 222 (Notidanus).
1915 B, lxix.
1921 A, 179 (Notidanus).
Zittel and Koken 1911 A, 49 (Notidanus).
Zittel and Schlosser 1923 A, 54, figs. 29, 59, 73, 74 (Notidanus).
Zittel and Woodward 1902 A, 25 (Notidanus).

Heptranchias andersoni Jordan.

Jordan, D. S. 1907 A, 101, fig. 3.
Anderson, F. M. 1911 A, 101.
Jordan, D. S. 1907 A, 102, 119, fig. 4*d* (Chiloscyllium sp.).
1910 B, 181.
Jordan and Beal 1913 A, 246 (H. andersoni); 246, 253, fig. *b* (Squatina lerichei).
Jordan and Gilbert 1919 A, 23 (Squatina lerichei).
Jordan and Hannibal 1923 A, 34, 62, pl. ii, figs. *x-z; dd, ee.*
Leriche, M. 1908 C, 303 (Notidanus primigenius); 305 ("Squatina").
Miocene; California.

NOTIDANION Jordan and Hannibal. Type *Notidanus primigenius* Agassiz.

Jordan and Hannibal in Jordan, D. S. 1923 A, 97.
Jordan and Hannibal 1923 A, 34.

Notidanion boreale Jordan and Hannibal.

Jordan and Hannibal 1923 A, 34, 61, pl. ii, fig. *g.*
Oligocene (San Lorenzo); Washington.

Notidanion primigenium (Agassiz).

Hay, O. P. 1902 A, 300 (Heptranchius? primigenius, H?. plectrodon).
Bassani, F. 1891 A, 43, pl. ii, figs. 21, 22 (Notidanus).
1901 A, 178 (Notidanus).
Chapman, F. 1918 A, 5, pl. vi, fig. 6 (Notidanus).
Eastman, C. R. 1904 H, 77, pl. xxix, fig. 6 (Notidanus, N. plectrodon a syn.).
Fowler, H. W. 1911 A, 24, fig. 1 (Heptranchias).
Gervais, P. 1852 A, explan. pl. lxxiv (Notidanus).
Gervais, P. 1859 A, 520, pl. lxxiv, figs. 9, 10 (Notidanus).
Jaekel, O. 1895 E, 33, pl. ii, fig. 22 (Notidanus).
Jordan, D. S. 1910 B, 181 (Notidanus).
1923 A, 97 ("Notidanion").
Jordan and Hannibal 1923 A, 36.
Lawley, R. 1875 B, 66, pl. i, figs. 1, 5 (Notidanus).
Leriche M. 1905 A, 207, fig. 62 (Notidanus).
1906 A, 296 (Notidanus).
1906 B, 352 (Notidanus).
1906 C, 420, fig. 71 (Notidanus).
1910 D, 257, pl. xiii, text-figs. 71, 72.
Priem, F. 1906 A, 196, pl. viii, figs. 1, 2 (Notidanus).
1912 A, 217, 225, pl. vi, fig. 34, text-figs. 17-19 (Notidanus).
1914 A, 121, pl. iii, fig. 11 (Notidanus).
Shattuck, G. B. 1904 A, xcvi (Heptranchias).
Woodward, A. S. 1889 I, 6 (Notidanus).
Zierler, F. E. 1905 A, 511 (Heptranchias).
Miocene; New Jersey: Miocene (Calvert); Maryland: Eocene?; New Jersey: Upper Eocene and Miocene; Europe.

GYROPLEURODUS Gill. Type *Cestracion francisci* Girard.

Gill, T. 1862, Proc. Acad. Nat. Sci. Phila., 469.
Jordan, D. S. 1919 B, 317.
Jordan and Evermann 1896 A, 20.
Jordan and Gilbert 1882 A, 32 (Gyropleurodus); 875 (Heterodontus).
Jordan and Hannibal 1923 A, 32.
Regan, C. T. 1908 D, 494.

Gyropleurodus francisci (Girard).

Girard, C. F. 1854, Proc. Acad. Nat. Sci. Phila., 196 (Cestracion).
Gill, T. 1862, Proc. Acad. Nat. Sci. Phila., 492.
Günther, A. C. 1870 A, 416 (Cestracion).
Jordan and Evermann 1896 A, 20.
Jordan and Gilbert 1883 A, 31.
Jordan and Hannibal 1923 A, 32, pl. iv, fig. *j.*
Miklouho-Maclay and Macleay 1879 A, p. 315, pl. xxvi (Heterodontus).
Recent; Coast of California: Pleistocene or Recent?; California.

STRONGYLISCUS Jordan. Type *S. robustus* Jordan.

Jordan, D. S. 1925 B, 7.

Strongyliscus robustus Jordan.

Jordan, D. S. 1925 B, 7, pl. iv.
Miocene (Monterey); California.

LAMNOIDÆ, new form.

Hay, O. P. 1902 A, 301 (Galeoidea, in part).
Garman, S. 1913 A, 10 (Carcharoidei, Isuroidei).
Gill, T. 1873 F, 12 (Lamnoidea).
Jordan, D. S. 1923 A, 99 (Lamnoidei).
Regan, C. T. 1906 A, 723 (Galeoidei, in part)

CARCHARIIDÆ Jordan and Gilbert.

Jordan and Gilbert 1882 A, 27 (Carchariidæ); 62 (Odontaspididæ).
Hay, O. P. 1902 A, 301 (Carchariinæ).
Allis, E. P. 1923 B, 144.
1926 B, 338.
Arldt, T. 1923 A, 484 ("odontaspiden").
Garman, S. 1913 A, 23 (Carcharidæ).
Gill, T. 1872 C, 24 (Odontaspididæ).
1905 A, 658 (Odontaspididæ, Carchariidæ).
Gregory, W. K. 1907 D, 447.
Hussakof, L. 1909 A, 262 (Odontaspididæ).
Jordan, D. S. 1905 A, i, 534 (Odontaspididæ).
1907 B, 191, 758 (Odontaspididæ).
1923 A, 99 (Carchariidae, Odontaspidæ).
Jordan and Hannibal 1923 A, 45.
Leigh-Sharpe, W. H. 1926 A, 315, 339.
Radcliffe L. 1916 A, 243, 244.
Regan, C. T. 1906 A, 723, 741, 744 (Odontaspididæ).
Ridewood, W. G. 1921 A, 351, 355, 395 (Odontaspididæ).

ODONTASPIS Agassiz. Type *O. ferox* Agassiz.

Hay, O. P. 1902 A, 301 (Carcharias).
Abel, O. 1919 A, 121, 123, figs. 79, 82.
Agassiz, L. 1874 A, 130.
Ameghino, F. 1906 A, 186.
Braus H. 1901 B, 191.
Bridge, T. W. 1904 A, 451.
Bronn, H. G. 1848 A, 218 (Carcharias).
1848 B, 835.
1849 A, 642; 645 (Carcharias).
Chapman, F. 1918 A, 10.
Coulon, L. 1903 A 124.
Cunningham, J. T. 1897 A, 496 (Carcharias).
Daniel, J. F. 1922 A, figs. 14, 127.
Deinse, A. B. 1916 A, 448.
Dollo, L. 1904 C, 48.
Duméril A. 1856 A, 132.
Eastman C. R. 1902 B, 56 (Carcharias).
1904 H, 78, 79.
Fürbringer, K. 1903 A, 399.
Garman, S. 1913 A, 3, 23 (Carcharias).
Gaupp, E. 1898 B, 816, 862 (Carcharias).
1905 D, 874.
Gibian A. 1912 A, 61.
Giebel, C. G. 1855 A, 116.
Gill, T. 1905 A, 658.
Hussakof, L. 1909 A, 259 (Carcharias).
Ishiwara, Y. 1921 A, 69, 74 (Carcharias).
Jacobshagen, E. 1920 A, 92 (Carcharias).
1923 A, 176 (Carcharias).
Jaekel, O. 1895 E, 29.
Jordan, D. S. 1905 A, ii, 534.
1907 B, 191, 199.
1919 B, 184 (Odontaspis a syn.).
1923 A, 99, 100 (Carcharias).
1928 A, 1 (Carcharias).
Jordan and Beal 1913 A, 249 (Carcharias).
Jordan and Evermann 1917 A, 77, 97 (Carcharias).
Jordan and Gilbert 1882 A, 27 (Carcharias).
Jordan and Hannibal 1923 A, 45.
Leigh-Sharpe, W. H. 1926 A, 340.
Leriche, M. 1905 A, 115.
Meek, A. 1916 A, 38 (Carcharias).
Owen, R. 1845 B, 28.
Priem, F. 1907 B, 413.
1908 B, 77, 95, 122, fig. 60.
Radcliffe, L. 1916 A, 243, fig. 1 (Carcharias).
Regan, C. T. 1906 A, 723.
Reynolds, S. H. 1897 A, 107, fig. 14.
Roth, W. 1911 A, 540, pls. vi, viii.
Schlesinger, G. 1909 A, 142 (Carcharias).
Schmalhausen, J. J. 1913 A, 21 (Carcharias).
Stefano, G. 1912 A, 378.
Stromer, E. 1905 C, 169.
Weiler, W. 1922 A, 88.
Woodward, A. S. 1889 I, 7.
1898 B, 48.
Zittel and Koken 1911 A, 52.
Zittel and Schlosser 1923 A, 57.

Odontaspis clavata (Agassiz).

Hay, O. P. 1902 A, 302 (Lamna).
Anderson, F. M. 1911 A, 101 (Lamna).
Blake, W. P. 1857 A, 172 (Lamna).
1866 A, 290 (Lamna).
Jordan, D. S. 1907 A, 106, fig. 8 (Lamna).
1910 B, 181 (Lamna).
Jordan and Beal 1913 A, 245, 249 (Carcharias).
Jordan and Gilbert 1919 A, 21 (Carcharias).
Jordan and Hannibal 1923 A, 46, 62, pl. ii, figs. *a*, *h*. (Carcharias).
Leriche, M. 1908 C, 303 (O. cuspidata).
Miocene (Monterey); California.

Odontaspis contortidens (Agassiz).

Agassiz, L. 1843 B, 294, pl. xxxvii, figs. 17-23 (Lamna contortidens); figs. 33, 34 (L. acutissima).
Hay, O. P. 1902 A, 301 (Carcharias).
Agassiz, L. 1854 A, 4 (Lamna, Odontaspis).
Chapman, F. 1918 A, 11, 31, text-fig. 1 (Carcharias).
Coulon, L. 1903 A, 125.
Jaekel, O. 1895 E, 31, pl. ii, figs. 11-18 (Carcharias).
Leriche, M. 1900 A, 192.
1906 C, 413.
1907 B, 341 (O. acutissima).
1910 D, 261, pl. xiv, figs. 1-27, text-figs. 73-76 (O. acutissima).
Newton, E. T. 1891 A, 107, pl. ix, figs. 17*a*, 17*b* (Carcharias).
Priem, F. 1912 A, 214, 218, 226, 238, pl. iv, figs. 18-25.
Stefano, G. 1901 A, 556, pl. x, figs. 9-12 (Carcharias).
1912 A, 389 (Carcharias).
Eocene to Pliocene; Europe: Eocene?; Alabama, South Carolina.

Odontaspis cuspidata (Agassiz).

Hay, O. P. 1902 A, 302 (Lamna).
Ameghino, F. 1906 A, 177, 259; pl. i, fig. 9.
1908 B, 492.

Bassani, F. 1891 A, 25, pl. i, fig. 14; pl. ii, figs. 10, 13, 16, 17.
Berry, E. W. 1916 A, 351, pl. viii, figs. 8, 9 (Lamna).
Chapman, F. 1918 A, 12.
Clark and Miller 1912 A, 117, 118.
Coulon, L. 1903 A, 122 (Carcharias).
Dall, W. H. 1894 A, 297 (Lamna).
Eastman, C. R. 1901 B, 105; pl. xiv, figs. 1*a*, 1*b*, 6*a*, 6*b*.
1904 H, 78; pl. xxx, fig. 1.
Fowler, H. W. 1911 A, 43; figs. 12-15 (Lamna).
Hay, O. P. 1922 B, 3 (Lamna).
Ishiwara, Y. 1921 A, 70, pl. xii, figs. 12-21 (Carcharias).
Jordan, D. S. 1910 B, 181 (Carcharias).
Jordan and Beal 1913 A, 249.
Leriche, M. 1902 A, 22.
1906 C, 413 (Lamna, Odontaspis).
1910 B, 328, pl. iii, figs. 9-12.
1910 D, 268, pl. xv, figs. 1-21.
1913 A, 83.
1926 A, 15.
Lyell, C. 1845 C, 549, 560 (Lamna).
Priem, F. 1908 B, 78.
1911 B, 330, 336.
1912 A, 214, 217, 226, 237; pl. vi, figs. 10-17.
Sellards, E. H. pl. vii, figs. 1-5, 7, 9 ("shark").
Shattuck, G. B. 1904 A, xcvi (Carcharias).
Stanton, T. W. 1920 A, 49, pl. ix. figs. 12, 13 (Lamna).
Stefano, G. 1912 A, 389, pls. xiii, xiv.
1912 B, 46, pls. i, ii.
Stromer, E. 1905 C, 171, 178; pl. xv, figs. 26, 27.
Weiler, W. 1922 A, 88, 104.
Woodward, A. S. 1889 I, 7, figs. 12-14.
Zittel and Schlosser 1923 A, 57, fig. 85 (Lamna).
Upper Cretaceous (Manasquan, etc.); New Jersey: (Lance); South Dakota: (Matawan, Monmouth); Maryland: Eocene, New Jersey: Eocene (Nanjemoy, Acqua); Maryland; Miocene (Calvert); Maryland: Miocene (Kirkwood); New Jersey: Miocene (Chesapeake); Massachusetts: Eocene, Miocene; Europe.

Odontaspis cuspidata hopei (Agassiz).

Hay, O. P. 1902 A, 302 (Lamna cuspidata, part).
Coulon, L. 1903 A, 123 (Lamna hopei).
Leriche, M. 1900 A, 192.
1905 A, 75, 119, 187, 208, 215.
1906 B, 350, 351, 352, 355.
1906 C, 416 (O. hopei).
1907 A, 354, pl. iii, fig. 4.
1908 A, 238, pl. iv, figs. 1-12.
Priem, F. 1906 A, 197; pl. viii, figs. 3-10.
Stefano, G. 1912 A, 384, pls. xii, xiv.
1912 B, 45, pls. i, ii.
Stromer, E. 1905 C, 171, 178 (O. hopei).
Woodward, A. S. 1889 I, 7 (This species?).
Eocene; Europe, Georgia, Alabama, Virginia, Kansas, S. Carolina: Miocene; Maryland, N. Carolina.

Odontaspis duplex Agassiz.

Hay, O. P. 1902 A, 302 (Carcharias).
Tertiary of Alabama?

Odontaspis elegans (Agassiz).

Hay, O. P. 1902 A, 303 (Lamna).
Ameghino, F. 1906 A, 185, 259, 463.
Berry, E. W. 1916 A, 350, pl. viii, figs. 5-7 (Lamna).
Chapman, F. 1918 A, 11, pl. iii, fig. 1.
Clark and Miller 1912 A, 117, 118 (Carcharias).
Coulon, L. 1903 A, 123 (Lamna).
Eastman, C. R. 1901 B, 104; pl. xiv, figs. 2*a*, 2*b*, 2*c*, 3*a*, 3*b*, 3*c*.
1904 H, 79; pl. xxx, figs. 2, 3.
Fowler, H. W. 1911 A, 48; figs. 16, 17 (Lamna).
Gervais, P. 1852 A, explan. pl. lxxv, fig. 3 (Lamna).
1859 A, 520, pl. lxxv, fig. 3 (Lamna).
Giebel, C. G. 1855 A, 116, pl. xlvii, fig. 16 (Lamna).
Hopkins, F. V. 1871 A, 13 (Lamna).
Humphreys, J. 1908 A, 14, pl. i, fig. 2.
Jordan and Hannibal 1923 A, 46.
Leriche, M. 1900 A, 191.
1902 A, 21 (= Otodus macrotus).
1906 C, 414.
Mantell, G. A. 1844 A, 624, fig. 130 (Lamna).
Miller, B. L. 1911 A, 103.
1912 A, 2.
Newton, E. T. 1891 A, 107, pl. ix, figs. 16*a*, 16*b*.
Priem, F. 1896 B, 13 (Lamna).
1901 A, 483, pl. xi, figs. 27, 28.
1908 B, 78.
Ridewood, W. G. 1896 A, 382, fig. 4.
Rutot, A. 1875 A, 34 (Lamna).
Shattuck, G. B. 1904 A, xcvi.
Shattuck, Miller, and Bibbins 1907 A, 5.
Stromer, E. 1905 C, 170 (Lamna).
Winckler, T. C. 1876 A, 9 (Lamna).
Woodward, A. S. 1889 I, 8, pl. i, figs. 15-17.
Upper Cretaceous (Matawan, Monmouth); New Jersey; Eocene; Louisiana; Eocene (Aquia); Virginia, Maryland: Miocene; New Jersey: Miocene (Calvert); Maryland.

Odontaspis littoralis (Mitchill).

Mitchill, S. L. 1818, Amer. Monthly Mag., ii, 328 (Squalus).
Jordan and Evermann 1896 A, 46 (Carcharias).
Jordan and Gilbert 1882 A, 874.
Leriche, M. 1906 C, 207 (Odontaspis americanus).
Mitchill, S. L. 1815 A, 483 (Squalus americanus; not of Shaw).
Said by Mitchill (op. cit., 1818) to be met with in digging wells in Richmond and as far up as Alexandria, Virginia.

Odontaspis lomitæ (Jordan and Hannibal).

Jordan and Hannibal 1923 A, 48, 63, pl. vi, figs. *i*, *c* (Carcharias).
Hay, O. P. 1927 D, 174 (Carcharias).
Pliocene or Pleistocene (Lomita); California.

Odontaspis macrota (Agassiz).

Hay, O. P. 1902 A, 305 (Otodus).
Chapman, F. 1918 A, 15, pl. iii, figs. 8, 9; pl. ix, figs. 6, 7 (Lamna compressa).

Dollo, L. 1914 A, 290.
Eastman C. R. 1901 B, 105, pl. xiv, figs. 4a, 4b.
Leriche, M. 1901 A, 156, pl. v, figs. 13-15.
1902 A, 11, 19.
1905 A, 75, 120, 187, 200, 208, 215.
1906 B, 350, 355.
1906 C, 417 (Odontaspis); 418 (Otodus).
1908 A, 242.
1913 A, 78, pl. x, fig. 2.
1926 A, 15.
Priem, F. 1906 A, 198 (Lamna).
1908 B, 79, pl. iv, fig. 7 (Lamna).
Stefano, G. 1912 A, 376, pls. xiii, xiv (Lamna. This species?).
Stromer, E. 1903 A, 32, pl. i, fig. 8 (Lamna).
1905 C, 171 (Lamna).
Winckler, T. C. 1876 A, 9.
Woodward, A. S. 1889 I, 8, pl. i, figs. 19, 20 (Lamna).
Eocene (Nanjimoy and Aquia); Maryland: (Nanjimoy); Virginia: Europe.

Odontaspis morricei (Jordan and Beal).

Jordan and Beal 1913 A, 245, 249, fig. *c.* (Carcharias).
Jordan and Gilbert 1919 A, 21 (Carcharias).
Jordan and Hannibal 1923 A, 43, 62, pl. ii, fig. *t;* pl. iv, figs. *a, b, e;* pl. vi, fig. *h* (Xiphodolamia).
Miocene (Monterey); California.

Odontaspis sanctæ-crucis (Jordan and Hannibal).

Jordan and Hannibal 1923 A, 48, 62, pl. iii, figs. *d, k* (Carcharias?).
Miocene (Monterey); California.

Odontaspis verticalis (Agassiz).

Hay, O. P. 1902 A, 302 (Carcharias).
Coulon, L. 1903 A, 122 (Lamna).
Leriche, M. 1900 A, 192.
1902 A, 33 (Lamna).
1905 A, 75, 121, 188, 200, pl. vi, figs. 20-35 (Lamna).
1906 B, 350, 352, 355.
1906 C, 423, pl. ix, figs. 20-35 (Lamna).
1908 A, 238 (Lamna, Odontaspis).
Priem, F. 1908 B, 79 (Lamna).
Stromer, E. 1903 A, 31, pl. i, figs. 10, 11 (Odontaspis).
Eocene; Europe, Egypt: Eocene; South Carolina, Alabama.

Odontaspis virgatula (Jordan and Hannibal).

Jordan and Hannibal 1923 A, 46, 63, pl. iii, figs. *t, u* (Carcharias).
Hay, O. P. 1927 D, 174 (Carcharias).
Pliocene or Pleistocene (Lomita); California.

Odontaspis sp. indet.

Dumble, E. T. 1920 A, 175 (Odontaspis). Eocene (Jackson); Texas.
Gidley, J. W. 1927 E, 274 (Carcharias). Pleistocene; Florida.
Hay, O. P. 1927 D, 274 (Carcharias). Pleistocene; Florida.
Jordan, D. S. 1907 A, 104, fig. 5 (Carcharias). Miocene; California.
Sellards, E. H. 1915 D, 98, fig. 26 (Carcharias). Pliocene (Bone Valley); Florida.

MITSUKURINIDÆ Jordan.

Jordan, D. S. 1898, Proc. Calif. Acad. Sci. (3), No. 6, 201.
Jordan, D. S. 1923 A, 99.

Scapanorhynchus A. S. Woodward. Type *S. lewisii* Davis.

Woodward, A. S. 1889 D, 351 (To replace *Rhinognathus* Davis, preoccupied).
Ameghino, F. 1906 A, 186.
Arldt, T. 1923 A, 484.
Chapman, F. 1918 A, 8.
Garman, S. 1913 A, 23, 28.
Hussakof, L. 1909 A, 257.
Jordan, D. S. 1898, Proc. Calif. Acad. Sci. (3), Zool. vol. i, No. 6 (Mitsukurina).
1920 C, 449.
1923 A, 99.
Leriche, M. 1902 A, 11.
1902 B, 103.
1906 C, 421.
Priem, F. 1896 B, 13, pl. ii, figs. 1-6.
1908 B, 39, fig. 15.
Ridewood, W. G. 1921 A, 359, fig. 12.
Woodward, A. S. 1889 D, 351.
1899 E, 487.
1912 A (1911) 210.
1921 A, 180.
Zittel and Schlosser 1923 A, 57 (Mitsukurina a syn.).

Scapanorhynchus rhaphiodon (Agassiz).

Hay, O. P. 1902 A, 303 (Lamna).
Chapman, F. 1918 A, 10, pl. iii, figs. 2, 16.
Coulon, L. 1903 A, 124 (Odontaspis).
Fritsch, A. 1878 A, 10, text-fig. 17 (Lamna).
Hennig, E. 1914 A, 308, pl. xxiii, fig. 7 (S. raphiodon).
Leriche, M. 1902 B, 106, pl. iii, figs. 8-13.
1906 C, 421.
Priem, F. 1896 B, 15, pl. ii, figs. 1-6.
1907 A, 463.
1912 B, 258, 267.
1913 A, 160.
1914 C, 366, pl. x, figs. 8-10.
Sauvage, E. 1867 A, 122 (Lamna).
Tanner, V. M. 1925 A, 6, pl. i, figs. 1, 2.
Woodward, A. S. 1889 D, 353.
1912 A (1911), 211, pl. xliv, figs. 14-17.
Cretaceous; Europe, India: Tertiary of Alabama?

Scapanorhynchus subulatus (Agassiz).

Hay, O. P. 1902 A, 303 (Lamna).
Ameghino, F. 1906 A, 177, pl. i, fig. 7.
1908 B, 487.
Chapman, F. 1918 A, 8, 31, pl. iii, fig. 13; pl. v, figs. 6-10.
Coulon, L. 1903 A, 125 (Odontaspis).
Fritsch, A. 1878 A, 9, text-figs. 15, 16 (Lamna).
Leriche, M. 1902 B, 107, pl. iii, figs. 5-7.
1906 C, 422.
Priem, F. 1896 B, 15, pl. ii, figs. 7-10.
1907 A, 463, 464.
1912 B, 258, 267.
1913 A, 160.
Woodward, A. S. 1889 D, 386 (This genus?).
1912 A (1911), 212, pl. xliv, figs. 18-21.
Miocene?; Maryland?.

LAMNIDÆ Richardson.

Richardson, J. 1846 A, 195.
Hay, O. P. 1902 A, 301.
Allis, E. P. 1913 A (Carchariidæ).
Arldt, T. 1907 D, 184, 283.
Bassani, F. 1891 A, 13.
Bonaparte, C. L. 1840 A, 46 (Lamnini).
Bridge, T. W. 1904 A, 450.
Bronn, H. G. 1849 A, 781, seq. (Lamnoidei).
Chapman, F. 1918 A, 8.
Cope, E. D. 1891 N, 17.
Cunningham, J. T. 1912 A, 246.
Deinse, A. B. 1916 A, 446.
Dollo, L. 1889 F, 342.
1904 C, 48.
Fitzinger, L. J. 1873 A, 55 (Lamnæ).
Fowler, H. W. 1911 A, 31.
Garman, S. 1913 A, 31 (Isuridæ).
Gaupp, E. 1905 D, 894 ("lamniden").
Goodrich, E. S. 1909 A, 149.
Gregory, W. K. 1907 D, 447.
Hay, O. P. 1901 B, 67.
Hoernes, R. 1886 A, 541.
Huber, O. 1901 A, 617.
Jacobshagen, E. 1923 A, 176 ("lamniden").
Jaekel, O. 1895 E, 22.
Jordan, D. S. 1905 A, I, 537; II, 578.
1907 B, 194, 758.
1923 A, 99.
Jordan and Gilbert 1882 A, 28.
Jordan and Hannibal 1923 A, 45, 48.
Kingsley, J. S. 1885 A, 79.
Leigh-Sharpe, W. H. 1926 A, 340.
Leriche, M. 1902 B, 103.
1906 C, 273.
Leunis and Ludwig 1883 A, 784.
Mayer, P. 1886 A, 277 ("lamniden").
Müller and Henley 1838 A, 36 (Lamnoidea).
Priem, F. 1908 B, 25 ("lamnidés").
Radcliffe, L. 1916 A, 247 (Isuridæ).
Rauther, M. 1913 A, 1098.
Regan, C. T. 1906 A, 723, 741, 744.
Ridewood, W. G. 1895 B, 429.
1921 A, 355, 395.
Roth, W. 1911 A, 538-543.
Schlosser, M. 1917 A, 136, 139, 141 ("lamniden").
Schmalhausen, J. J. 1913 A, 25.
Steinmann, G. 1907 A, 401.
Stromer, E. 1905 C, 167, 179.
1912 A, 19.
Tomes, C. S. 1898 B, 443.
Wallace, A. R. 1876 A, ii, 460.
Weiler, W. 1922 A, 88, 104.
Woodward. A. S. 1889 I, 7.
1891 E, 62.
1916 A, lxxiv ("lamnid sharks")
1921 B, 38.
Zittel and Koken 1911 A, 51.
Zittel and Schlosser 1923 A, 57.

LAMNINÆ Gill.

Gill, T. 1862 A, 368.
Hay, O. P. 1902 A, 302.
Goodrich, E. S. 1909 A, 150.

LAMNA Cuvier. Type *Squalus cornubicus* Gmelin.

Hay, O. P. 1902 A, 302.
Abel, O. 1909 D (225).
1912 F, 422, 517.
1915 A, 415.
1920 A, 327, fig. 518.
Agassiz, L. 1835 G, 187.
Ameghino, F. 1906 A, 186.
Arldt, T. 1923 A, 484.
Bassani, F. 1891 A, 22.
Braus, H. 1906 A, 186, fig. 187.
Bridge, T. W. 1904 A, 451.
Bronn, H. G. 1848 A, 625.
1849 A, 643.
Chapman, F. 1918 A, 13.
Coulon, L. 1903 A, 122.
Daniel, J. F. 1922 A, 101, fig. 98.
Darton, N. H. 1908 A, 457.
Deinse, A. B. 1916 A, 442.
Dollo, L. 1904 C, 48.
Duméril, A. 1856 A, 124 ("lamie").
Eastman, C. R. 1901 B, 103 (Odontaspis).
Fowler, H. W. 1911 A, 42.
Garman, S. 1913 A, 34.
Giebel, C. G. 1855 A, 116.
Goodrich, E. S. 1906 A, 345.
1909 A, 511, figs.
Haswell, W. A. 1884 A, 84.
Hay, O. P. 1901 B, 67.
Heilprin, A. 1887 A, 297, 300.
Huber, O. 1901 A, 617, pl. xxvii.
Jacobshagen, E. 1923 A, 176.
Jordan, D. S. 1905 A, i, 534, 538.
1907 B, 194.
1917 A, 97.
1923 A, 99.
Jordan and Beal 1913 A, 249.
Jordan and Evermann 1917 A, 97 ("Type *Squalus cornubicus* Bloch and Schneider").
Jordan and Gilbert 1882 A, 29.
Jordan and Hannibal 1923 A, 48, 50.
Klaatsch, H. 1890 A, 121.
Leigh-Sharpe, W. H. 1921 A, 367, figs. 5-7.

Leriche, M. 1906 C, 416 (Lamna); 419 (Odontaspis).
Leunis and Ludwig 1883 A, 784.
Mantell, G. A. 1844 A, 623.
Müller and Henle 1838 A, 36.
Osburn, R. C. 1907 B, 182.
Owen, R. 1839 G, 211.
1845 B, 24, 26, 28, pl. v, fig. 1.
1868 A, 888.
Priem, F. 1896 B, 13.
1908 B, 41, 78.
Probst, J. 1886 B, 312.
Ridewood, W. G. 1896 A, 382, fig. 2.
1921 A, 355, fig. 9.
Roth, W. 1911 A, 538, pl. vii.
Sauvage, E. 1867 A, 120.
Schmalhausen, J. J. 1913 A, 21.
Stannius, H. 1854 A.
Stephan, P. 1900 A, 327.
Stefano, G. 1912 A, 370.
Stromer, E. 1905 C, 169.
Terra, P. 1911 A, 200, fig. 48.
Tomes, C. S. 1898 B, 444, 447, pl. xvii.
1898 C, 345.
Weidenreich, F. 1926 A, 46.
Weiler, W. 1922 A, 88.
Woodward, A. S. 1889 I, 10.
1912 A (1911), 206.
Zittel and Koken 1911 A, 52.
Zittel and Schlosser 1923 A, 57, figs. 85-88.

Lamna appendiculata Agassiz.

Hay, O. P. 1902 A, 304 (Otodus).
Ameghino, F. 1906 A, 71, 178, pl. i, fig. 12.
1908 B, 491.
Chapman, F. 1918 A, 11, 14, text-figs. 2.
Coulon, L. 1903 A, 126 (Otodus).
Dollo, L. 1914 A, 290.
Fowler, H. W. 1911 A, 54, figs. 20, 21 (Otodus).
Fritsch, A. 1878 A, 5, text-figs. 5, 42 (Otodus).
Gervais, P. 1852 A, explan. pl. lxxvi (Lamna acuminata, Corax appendiculatus).
1859 A, 524, pl. lxxvi (Lamna acuminata, Corax appendiculatus).
Gidley, J. W. 1926 E, 16 (Otodus).
Gorjanovič-Kramberger, D. 1891 A, 92, pl. viii, fig. 16.
Hopkins, F. V. 1871 A, 13 (Otodus).
Jordan and Beal 1913 A, 246, 250.
Jordan and Hannibal 1923 A, 46.
Lambe, L. M. 1904 C, 25, 37, 41.
Leriche, M. 1902 A, 11.
1902 B, 111, pl. iii, figs. 28-38.
1906 B, 348, 350.
1906 C, 411.
1913 A. 78, pl. x, figs. 3-5.
Lyell, C. 1844 A, 303.
Priem, F. 1896 B, 14, pl. i, figs. 5-9.
1907 A, 463, 464, figs. 2, 5.
1908 B, 47, 69, pl. i, fig. 19, text-figs. 27, 28.
1912 B, 259, 268.
1913 A, 160.
1914 C, 366, pl. x, fig. 11.
Sauvage, E. 1867 A, 120 (Otodus).
Spillman, W. 1863 A (Otodus).
Stephenson, L. W. 1912 A, 127, 128, 130, 136, 138, 148, 149 (Otodus).
Tanner, V. M. 1925 A, 6, pl. i, fig. 3.
Upham, W. 1888 A, 603 (Otodus).
Woodward, A. S. 1912 A (1911), 206, pl. xliv, figs. 3-7, text-figs. 63, 64.
Zittel and Schlosser 1923 A, 57, fig. 86.
Upper Cretaceous; California, British Columbia, New Jersey, North Carolina, Minnesota, Iowa: Eocene; Louisiana: Miocene; New Jersey.

Lamna caurina Jordan and Hannibal.

Jordan and Hannibal 1923 A, 50, 61, pl. iii, figs. *o, s.*
Oligocene (Lorenzo); Washington.

Lamna crassidens Agassiz.

Hay, O. P. 1902 A, 302.
Coulon, L. 1903 A, 123.
Leriche, M. 1902 A, 32 (Odontaspis).
1905 A, 75, 120, 187, 200, 208, pl. vi, figs. 13-19 (Odontaspis).
1906 C, 413, pl. ix, figs. 13-19 (Lamna).
Eocene and Miocene; Europe: Miocene; Virginia.

Lamna gracilis Agassiz.

Hay, O. P. 1902 A, 303.
Leriche, M. 1902 B, 108, pl. iii, fig. 14 (Scapanorhynchus).
Sauvage, E. 1867 A, 120.
Cretaceous; Europe: Eocene; South Carolina.

Lamna macrorhiza Cope.

Hay, O. P. 1902 A, 303.
Coulon, L. 1903 A, 125 (Odontaspis).
Hussakof, L. 1908 A, 31.
Leriche, M. 1902 B, 109, pl. iii, figs. 18-27 (Odontaspis).
1906 B, 348 (Odontaspis).
1910 A, 459 (Odontaspis).
Priem, F. 1907 C, 49 (Scapanorhynchus).
1908 B, 41, fig. 16 (Scapanorhynchus).
1912 B, 259 (Scapanorhynchus).
Upper Cretaceous (Niobrara); Texas or Kansas?: Cenomanian, Senonian; France.

Lamna manitobensis Whiteaves.

Hay, O. P. 1902 A, 303.
Lambe, L. M. 1904 C, 21, 36, 41.
Tyrrell, J. B. 1892 A, 113.
Cretaceous (Colorado); Manitoba.

Lamna mudgei Cope.

Hay, O. P. 1902 A, 303.
Fowler, H. W. 1911 A, 51, fig. 18.
Gidley, J. W. 1926 E, 16.
Upper Cretaceous (Niobrara); Kansas: ("Greensand No. 4"); New Jersey.

Lamna ornata Agassiz.

Hay, O. P. 1902 A, 303.
Blake, W. P. 1857 A, 152, figs. 1, 2.

Jordan, D. S. 1907 A, 107.
Jordan and Beal 1913 A, 250.
Jordan and Hannibal 1923 A, 46, 61, pl. iii, figs. *v*, *w* (Carcharias).
Miocene; California.

Lamna? quinquelateralis Cragin.

Hay, O. P. 1902 A, 303.
Cretaceous (Comanche); Kansas.

Lamna texana Roemer.

Hay, O. P. 1902 A, 303.
Fowler, H. W. 1911 A, 52, fig. 19.
Gidley, J. W. 1911 in Veatch and Stephenson 1911 A, 208.
Stephenson, L. W. 1912 A, 127, 130, 136, 138, 140, 143, 148, 149.
Upper Cretaceous; Texas, New Jersey: New Mexico (Ripley); Georgia.

Lamna sp. indet.

Hay, O. P. 1902 A, 304.
Bowen, C. F. 1915 A, 120. Upper Cretaceous (Hell Creek); Montana.
Brown, B. 1907 A, 842. Upper Cretaceous (Hell Creek); Montana.
Cannon, G. L. 1890 B, 313. Upper Cretaceous (Niobrara); Colorado.
Gidley, J. W. 1927 E, 274. Pleistocene; Florida.
Gilbert, G. K. 1875 A, 544.
Hay, O. P. 1923 A, 370.
Jordan, D. S. 1907 A, 107. Cretaceous (Chico); California.
Lee, W. T. 1917 A, 202. Upper Cretaceous (Mesaverde); New Mexico.
Sternberg, C. M. 1926 A, 104. Upper Cretaceous (Edmonton); Alberta.
Tuomey, M. 1848 A, 160, 163, 166, 180. Tertiary; South Carolina.
Worthen, A. H. 1890 A, 4, figs. 1-3. Skunk and Des Moines rivers, Iowa.

Sphenodus Agassiz. Type *Lamna longidens* Agassiz.

Hay, O. P. 1902 A, 302.
Bronn, H. G. 1848 B, 1165.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1919 B, 214 (Preoccupied by Sphenodon).
Jordan, D. S. 1923 A, 99.
Schlosser, M. 1917 A, 136, 137 (Orthacodus).

Sphenodus rectidens Emmons.

Hay, O. P. 1902 A, 302.
Cretaceous; North Carolina.

Leptostyrax Willist. Type *L. bicuspidatus* Willist.

Hay, O. P. 1902 A, 304.
Jordan, D. S. 1923 A, 99.
Sauvage, H. E. 1901 F, 77.

Leptostyrax bicuspidatus Willist.

Hay, O. P. 1902 A, 304.
Cretaceous (Mentor); Kansas.

Otodus Agassiz. Type *O. obliquus* Agassiz.

Hay, O. P. 1902 A, 304.
Arldt, T. 1907 D, 339.
1923 A, 484.
Bronn, H. G. 1848 B, 886.
1849 A, 643.
Coulon, L. 1903 A, 126.
Eastman, C. R. 1901 B, 106.
Fowler, H. W. 1911 A, 53.
Giebel, C. G. 1855 A, 116.
Hay, O. P. 1901 B, 67.
Heilprin, A. 1887 A, 300.
Humphreys, J. 1908 A, 14, pl. i, figs. 1, 3.
Jordan, D. S. 1905 A, i, 538.
1907 B, 195.
1919 B, 214 (Syn.? of Lamna).
1923 A, 99.
Leriche, M. 1906 C, 419.
Owen, R. 1845 B, 28.
Priem F. 1896 B, 13.
1908 B, 48.
Probst, J. 1886 B, 308.
Sauvage, E. 1867 A, 119.
Stefano, G. 1912 A, 370.
Stromer, E. 1905 C, 169.
Terra, P. 1911 A, 200, fig. 50.
Winckler, T. C. 1876 A, 4.
Woodward, A. S. 1889 I, 10.

Otodus? apiculatus Agassiz.

Hay, O. P. 1902 A, 304.
Leriche, M. 1906 C, 411.
Eocene; South Carolina.

Otodus crassus Agassiz.

Hay, O. P. 1902 A, 304.
Chapman, F. 1918 A, 16, pl. iii, fig. 10; pl. vii, fig. 16 (Lamna).
Cretaceous; Europe, Alabama.

Otodus levis Gibbes.

Hay, O. P. 1902 A, 304.
Fowler, H. W. 1911 A, 57, fig. 22.
Eocene; South Carolina, New Jersey.

Otodus obliquus Agassiz.

Hay, O. P. 1902 A, 305.
Ameghino, F. 1906 A, 178, 185, pl. ii, fig. 18 (Lamna).
1908 B, 492 (Lamna).
Clark and Miller 1912 A, 117, 118.
Coulon, L. 1903 A, 126.
Eastman, C. R. 1901 B, 106, pl. xv, figs. 1-4e.
1904 H, 82. pl. xxx. figs. 8, 9.

Fowler, H. W. 1911 A, 57, figs. 23, 25 (O. lanceolatus).
Leriche, M. 1902 A, 33.
1905 A, 76.
1906 B, 350, 351, 352, 353, 355.
1906 C, 419.
1908 A, 242, pl. v, figs. 1-5.
1926 A, 15, text-fig. 1.
Miller, B. L. 1911 A, 103.
1912 A, 2.
Shattuck, G. B. 1904 A, xcvi.
Shattuck, Miller and Bibbins 1907 A, 5.
Stanton, T. W. 1920 A, 49, pl. ix, fig. 14.
Stefano, G. 1912 A, 373, pls. xiii, xiv (Lamna).
1912 B, 44, pls. i, ii (Lamna).
Stromer, E. 1905 C, 170.
Woodward, A. S. 1889 I, 10.
Zittel and Schlosser 1923 A, 57, fig. 87 (Lamna).
Tertiary; Europe, Egypt: Upper Cretaceous (Manasquan, etc.); New Jersey: (Lance); North Dakota, South Dakota: Eocene (Shark River); New Jersey: (Aquia); Virginia: (Pamunkey); Maryland: Miocene (Shiloh); New Jersey: (Calvert, Aquia); Maryland.

Otodus sulcatus Geinitz.

Geinitz, F. E. 1843, Char. Schicht. u. Petraf. sachs.-bohm. Kreidegeb., Nachtr., 5, pl. iv, fig. 2.
Hay, O. P. 1902 A, 304 (O. divaricatus).
Leidy, J.* 1873 B, 305, 351, pl. xviii, figs. 26-28 (O. divaricatus).
Leriche, M. 1902 B, 115, pl. iii, fig. 47.
Priem, F. 1908 B, 48.
1912 B, 268.
Cretaceous; Europe: Cretaceous; Texas, Mississippi: (Benton); Kansas.

Otodus trigonatus Agassiz.

Hay, O. P. 1902 A, 305.
Eocene; South Carolina?.

Otodus sp. indet.

Gilbert, G. K. 1875 A, 543. Cretaceous? New Mexico.
Merrill, G. P. 1907 A, 13. Eocene (Wasatch); New Mexico.
Tuomey, M. 1848 A, 160, 163, 166 ("Otodus").
Tertiary; South Carolina.
Uhler, P. H. 1892 A, 206 (Massachusetts).

Isurus Rafinesque. Type *I. oxyrhynchus Raf.* = *Oxyrhina spallanzanii* Bonaparte.

Unless otherwise indicated the authors, as cited, employ for this genus the name *Oxyrhina*.
Hay, O. P. 1902 A, 305 (Isurus).
Allis, E. P. 1915 A, 587.
Ameghino, F. 1906 A, 186.
Arldt, T. 1923 A, 484 (Isurus, Oxyrhina).
Bridge, T. W. 1904 A, 451 (Isurus).
Bronn, H. G. 1848 B, 888.
1849 A, 643.
Coulon, L. 1903 A, 120.
Duméril, A. 1856 A, 131.
Fowler, H. W. 1911 A, 31 (Isurus).
Garman, S. 1913 A, 34 (Isurus).
Gaudry, A. 1896 A, 172, fig. 158.
Giebel, C. G. 1855 A, 116, pl. xlvii.
Hay, O. P. 1901 B, 67 (Isurus).
Huber, O. 1901 A, 618.
Humphreys, J. 1908 A, 14.
Jaekel, O. 1895 E, 32.
1904 A, 27.
Jordan, D. S. 1907 A, 107 (Isurus).
1910 B, 182 (Isurus).
1917 A, 78.
1923 A, 99 (Isurus).
Jordan and Gilbert 1882 A, 28 (Isurus).
Jordan and Hannibal 1923 A, 50 (Isurus).
Lawley, R. 1878 B, 337.
1878 C, 343.
1881 A, pls.
Leriche, M. 1906 C, 419.
1910 D, 274, fig. 77.
Mantell, G. A. 1844 A, 628.
Müller and Henle 1838 A, 36.
Priem, F. 1908 B, 47.
Probst, J. 1886 B, 308.
Radcliffe, L. 1916 A, 247 (Isurus).
Regan, C. T. 1906 A, 734.
Ridewood, W. G. 1921 A, 358.
Roth, W. 1911 A, 539, pls. vi, vii.
Sauvage, E. 1867 A, 123.
Smith, H. M. 1916 A, 342 (Isurus).
Stefano, G. 1912 A, 397.
Stromer, E. 1905 C, 167.
Weiler, W. 1922 A, 88.
Woodward, A. S. 1889 I, 11.
1912 A (1911), 202.
Zittel and Koken 1911 A, 52.
Zittel and Schlosser 1923 A, 58, fig. 89.

Isurus crassus (Agassiz).

Hay, O. P. 1902 A, 305.
Ameghino, F. 1906 A, 180, pl. ii, fig. 19 (Oxyrhina).
Eastman, C. R. 1903 A, 185, pl. i, figs. 11-20; text-figs. 1-3 (Oxyrhina).
1906 E, 82, pl. ii, figs. 1-5, 8-12, 14-17 (Oxyrhina).
Leriche, M. 1906 A, 299 (Oxyrhina).
Stefano, G. 1912 A, 404, pls. xiii, xiv (Oxyrhina. This species?).
Worthen, A. H. 1890 A, 4, fig. 8 (Oxyrhina. This species?).
Eocene; South Carolina, Alabama, Illinois?.

Isurus desorii (Agassiz).

Hay, O. P. 1902 A, 305.
Ameghino, F. 1906 A, 180, 259; pl. ii, fig. 18, text-fig. 47 (Oxyrhina).
1908 B, 481 (Oxyrhina).
Chapman, F. 1918 A, 16, 31, pl. v, figs. 15, 16.
Coulon, L. 1903 A, 121 (Oxyrhina).
Eastman, C. R. 1904 H, 79, pl. xxx, fig. 4 (Oxyrhina).
Fowler, H. W. 1911 A, 32, figs. 5, 6.

* Not Cope, E. D. 1873 B, etc., as in Hay, O. P. 1902 A, 304.

Gervais, P. 1852 A, explan. pl. lxxv (Oxyrhina).
1859 A, 520; pl. lxxv, fig. 2 (Oxyrhina).
Hopkins, F. V. 1870 A, 93 (Oxyrhina).
Jordan, D. S. 1907 A, 112 (This species?).
Jordan and Beal 1913 A, 246, 251.
Jordan and Hannibal 1923 A, 48 (This genus and species?).
Lawley, R. 1878 C, 346, 349 (Oxyrhina).
Leriche, M. 1905 A, 128, 189.
1906 A, 299 (Oxyrhina desori).
1906 B, 353 (Oxyrhina desori).
1906 C, 414, pl. xvi, figs. 8-12 (Oxyrhina desori).
1910 B, 330, pl. iii, figs. 14, 15 (Oxyrhina desori).
1910 D, 275, pl. xvi, figs. 16-31 (Oxyrhina desori).
Priem, F. 1907 A, 465, fig. 8 (Oxyrhina).
1911 B, 330 (Oxyrhina).
1912 A, 215, 218, 227, 238; pl. vi, figs. 1-9; pl. vii, figs. 2-5 (Oxyrhina desori).
Sellards, E. H. 1913 A, pl. vi, figs. 5-7 ("shark").
Shattuck, G. B. 1904 A, xcvi.
Stefano, G. 1912 A, 399, pls. xiii, xiv (Oxyrhina).
Stromer, E. 1903 A, 30; pl. i, figs. 13-15 (Oxyrhina).
1905 C, 167; pl. xv, figs. 15-18 (Oxyrhina desori?).
Weiler, W. 1922 A, 89 (Oxyrhina).
Tertiary; Europe: (Chico); California??: Upper Cretaceous; New Jersey: Miocene; New Jersey, Maryland, Louisiana: Eocene; Alabama, North Carolina, South Carolina.

Isurus hastalis (Agassiz).

Hay, O. P. 1902 A, 306 (I. hastalis); 307 (I. planus, I. tumulus).
Ameghino, F. 1906 A, 179, 259 (Oxyrhina).
1908 B, 479 (Oxyrhina).
Anderson, F. M. 1911 A, 101 (I. planus, I. smithi, I. tumulus).
Arnold, R. 1907 A, 153 (Oxyrhina plana, O. tumulus).
Arnold and Hannibal 1913 A, 591 (Isurus).
Bassani, F. 1891 A, 31, pl. i, fig. 3; pl. ii, figs. 1, 26 (Oxyrhina).
Blake, W. P. 1857 A, 171, 172, figs. 1, 6 (Oxyrhina plana, O. tumula).
1866 A, 107, fig. 9 (Oxyrhina plana).
Chapman, F. 1918 A, 17, 31, pl. v, fig. 21; pl. vi, fig. 5.
Coulon, L. 1903 A, 121 (Oxyrhina plicatilis, O. hastalis).
Dall, W. H. 1894 A, 297 (Oxyrhina).
Eastman, C. R. 1904 H, 80, pl. xxx, figs. 5, 6 (Oxyrhina).
Fowler, H. W. 1911 A, 35, figs. 7, 8.
Gaudry, A. 1906 B, 114 (Oxyrhina).
Gervais, P. 1852 A, explan. pl. lxxv (Oxyrhina hastalis, O. xiphodon, O. plicatilis).
1859 A, 520, pls. lxxv (Oxyrhina hastalis, O. xiphodon, O. plicatilis).
Hay, O. P. 1927 D, 174.
Ishiwara, Y. 1921 A, 62, pl. x, figs. 1-32.
Jordan, D. S. 1907 A, 107, fig. 9 (I. planus); 109, figs. 10, 11 (I. tumulus); 111, fig. 12 (I. smithii).
1910 B, 181 (I. hastalis, I. planus, I. smithii, I. tumulus).
1922 B, 342, fig. *c* (I. planus. This species?).
1925 B, 7, 40.
Jordan and Beal 1913 A, 246, 249, 250, 251 (I. smithii, I. planus, I. tumulus).
Jordan and Gilbert 1919 A, 21, pl. vii, figs. A, D, H, (I. plana, I. smithi, I. tumulus, syns.).
Jordan and Hannibal 1923 A, 50, 61, pl. i, figs. *b, g, h;* pl. iii, figs. *g, x, y;* pl. v, figs. *d, e, f.*
Lawley, R. 1878 B, 339 (Oxyrhina).
1878 C, 348 (Oxyrhina planus, O. tumulus).
Leriche, M. 1906 A, 300 (Oxyrhina).
1906 C, 415.
1908 C, 303 (Oxyrhina, Isurus plana, I. tumulus and I. smithii as syns.).
Lyell, C. 1845 C, 549, 560 (I. hastalis, I. xiphodon).
Merriam, J. C. 1915 B, 288, fig. 7 (I. planus?).
Newton, E. T. 1891 A, 106, pl. ix, figs. 15a, 15b (Oxyrhina).
Priem, F. 1911 B, 330 (Oxyrhina).
1912 A, 215, 218, 227, 238 (Oxyrhina).
Shattuck, G. B. 1904 A, xcvi.
Stefano, G. 1901 A, 555, pl. x, figs. 1, 2 (Oxyrhina).
1912 A, 406, pls. xiii, xiv (Oxyrhina).
1912 B, 48, pls. i, ii.
Stromer, E. 1905 C, 168 (Oxyrhina).
Tomes, C. S. 1898 B, 446 (Oxyrhina).
Weiler, W. 1922 A, 88 (Oxyrhina).
Upper Cretaceous (Manasquan); New Jersey, Delaware: Eocene (Arago); Oregon: (Tejon); California: Miocene (Calvert and Choptank); Maryland, Virginia: (Monterey); California, Lower California: (Empire); Oregon: Pliocene (San Diego); California: Pleistocene (Lomita); California.

Isurus mantellii (Agassiz).

Hay, O. P. 1902 A, 306.
Abel, O. 1919 A, 109, fig. 68 (Oxyrhina).
Ameghino, F. 1906 A, 71 (Oxyrhina).
Bassani, F. 1890 A, 1, pls. (Oxyrhina).
Coulon, L. 1903 A, 120 (Oxyrhina).
Fowler, H. W. 1911 A, 38, figs. 9, 10 (I. acuminatus).
Gervais, P. 1852 A, explan. pl. lxxvi (Oxyrhina).
1859 A, 524, pl. lxxvi, figs. 3, 20 (Oxyrhina).
Hill, R. T. 1901 A, 328 (Oxyrhina extenta).
Lawley, R. 1878 B, 339 (Oxyrhina).
Leriche, M. 1902 B, 116, pl. iii, figs. 49-53 (Oxyrhina).
1906 B, 349 (Oxyrhina).
1906 C, 418 (Oxyrhina).
Moodie, R. L. 1912 C, 378.
Priem, F. 1896 B, 12, pl. i, fig. 10 (Oxyrhina mantelli).
1907 A, 464, fig. 4 (Oxyrhina).
1908 B, pl. ii, fig. 3 (Oxyrhina).
1912 B, 268 (Oxyrhina).

Sauvage, E. 1867 A, 123, pl. iii, fig. 12 (Oxyrhina).
Spillman, W. 1863 A (Oxyrhina).
Sternberg, C. H. 1900 B, 38 ("shark").
1906 B, 123 (Oxyrhina mantelli).
1907 C, 123 (Oxyrhina).
1909 C, 113 (Oxyrhina mantelli).
1911 A, 71 (Oxyrhina mantelli).
Woodward, A. S. 1912 A (1911), 202, pl. xliii, figs. 10-15; text-figs. 60, 61 (Oxyrhina).
Upper Cretaceous; Europe: Upper Cretaceous (Manasquan); New Jersey: Cretaceous; Alabama, Kansas, Mississippi: Eocene; New Jersey: Miocene; New Jersey.

Isurus minutus (Agassiz).

Hay, O. P. 1902 A, 306.
Eastman, C. R. 1904 H, 81 (Oxyrhina. This species?).
Shattuck, G. B. 1904 A, xcvi.
Stromer, E. 1905 C, 168 (Oxyrhina).
Miocene: North Carolina: Miocene (Chesapeake); Maryland: Eocene; South Carolina.

Isurus retroflexus (Agassiz).

Agassiz, L. 1843 B, 281, pl. xxxiii, fig. 10 (Oxyrhina).
Hay, O. P. 1902 A, 306 (I. hastalis, in part).
Agassiz, L. 1843 B, 283, pl. xxxvii, fig. 16 (Oxyrhina crassa).
Chapman, F. 1918 A, 18, pl. iv, figs. 1, 2.
Davis, J. W. 1888 A, 26, pl. iv, figs. 1, 2 (not 3), (O. vonhaastii); 27, pl. v, fig. 14 (O. recta).
Gibbes, R. W. 1846 A, 42 (Oxyrhina).
Woodward, A. S. 1889 D, 389 (O. crassa).
Miocene; South Carolina: Eocene, Miocene, Pliocene; Europe.

Isurus sanctæ-claræ Jordan and Hamlin.

Jordan and Hamlin 1923 A, 52, 61, pl. iii, figs. *e, f;* pl. vi, fig. *e.*
Cretaceous (Chico); California: Oligocene (Vaqueros, San Lorenzo); California: Miocene (Monterey); California.

Isurus sillimanii (Gibbes).

Hay, O. P. 1902 A, 307.
Eastman, C. R. 1904 H, 81, pl. xxx, fig. 7 (Oxyrhina).
Fowler, H. W. 1911 A, 40, fig. 11.
Shattuck, G. B. 1904 A, xcvi.
Stromer, E. 1905 C, 168 (Oxyrhina).
Miocene: New Jersey: Miocene (Calvert); Maryland: Eocene; Egypt.

Isurus sp. indet.

Hay, O. P. 1902 A, 307.
Cannon, G. L. 1890 B, 313 (Oxyrhina). Upper Cretaceous (Niobrara); Colorado.
Cope, E. D. 1875 E, 296 (Oxyrhina sp.). Greensand No. 4, New Jersey.
Fowler, H. W. 1911 A, 42.
Hay, O. P. 1923 A, 381. Pleistocene (Early); Florida.
Jordan and Hannibal 1923 A, 52. Eocene; Oregon.
Merriam, J. C. 1914 C, 644 (Temblor, California).
1915 E, 197, fig. 23.
Tuomey, M. 1848 A, 160, 163, 169 (Oxyrhina). Eocene; South Carolina.

CARCHARODONTINÆ Gill.

Gill, T. 1893 A, 130.
Hay, O. P. 1902 A, 307.
Jordan and Hannibal 1923 A, 53 (Carcharodontidæ).

Carcharodon A. Smith. Type *Squalus carcharias* Linn.

Hay, O. P. 1902 A, 307.
Ameghino, F. 1906 A, 186.
Arldt, T. 1923 A, 484.
Bassani, F. 1891 A, 13.
Bridge, T. W. 1904 A, 452.
Bronn, H. G. 1848 A, 219.
1849 A, 642.
Coulon, L. 1903 A, 127.
Cunningham, J. T. 1912 A, 284.
Deecke, W. 1913 A, 83.
Dollo, L. 1904 C, 48.
Duméril, A. 1856 A, 131.
Eastman, C. R. 1901 B, 107.
Fowler, H. W. 1911 A, 59.
Garman, S. 1913 A, 32.
Giebel, C. G. 1855 A, 116.
Hay, O. P. 1901 B, 67.
Heilprin, A. 1887 A, 297, 300.
Humphreys, J. 1908 A, 14, pl. i, fig. 4.
Jaekel, O. 1895 E, 23, pls. i, ii.
Jordan, D. S. 1905 A, 538.
1907 B, 195.
1919 B, 190.
Jordan, D. S. 1923 A, 99.
1928 A, 1.
Jordan and Gilbert 1882 A, 30.
Jordan and Hannibal 1923 A, 53.
Kingsley, J. S. 1885 A, 79.
Klaatsch, H. 1890 A, 121.
Lawley, R. 1878 A, 330.
1881 A, pls.
Leriche, M. 1906 C, 413.
1910 D, 287, fig. 89.
Leunis and Ludwig 1883 A, 784.
Matthew, W. D. 1908 H, 110.
Müller and Henle 1838 A, 36.
Owen, R. 1839 G, 212.
1845 B, 30.
Priem, F. 1908 B, 79, 123, fig. 61.
Probst, J. 1886 B, 309.
Radcliffe, L. 1916 A, 247.
Ridewood, W. G. 1921 A, 355, fig. 9.
Schmalhausen, J. J. 1913 A, 10.
Smith, H. M. 1916 A, 342.
Stefano, G. 1912 A, 357.
Storms, R. 1901 A, 259.

Stromer, E. 1905 C, 172.
1905 E, 315.
1925 A, 20.
Terra, P. 1911 A, 200, fig. 49.
Tomes, C. S. 1898 B, 459.
Wilckens, O. 1911 A, 708.
Woodward, A. S. 1889 I, 11.
Zittel and Koken 1911 A, 53.
Zittel and Schlosser 1923 A, 58.

Carcharodon angustidens Agassiz.

Hay, O. P. 1902 A, 307 (C. auriculatus, in part).
Ameghino, F. 1906 A, 181, pl. ii, fig. 20.
Coulon, L. 1903 A, 127.
Dall, W. H. 1894 A, 297.
Dean, B. 1923 A, 607, fig.
Hopkins, F. V. 1871 A, 13 (This species?).
Jordan, D. S. 1907 A, 112.
Leriche, M. 1906 A, 303.
1906 C, 411.
1910 B, 330.
Priem, F. 1906 A, 199, pl. viii, figs. 14, 15.
1911 B, 331, fig. 3.
1912 A, 215, 227, 239, pl. vii, fig. 7.
Sellards, E. H. 1913 A, pl. vii, fig. 6 ("shark." This species?).
Storms, R. 1901 A, 266.
Stromer, E. 1905 C, 173, pl. xv, figs. 1-7.
Tertiary; of world-wide distribution: Eocene and Miocene; reported from some parts of the United States: Eocene (Jackson and Vicksburg); Louisiana.

Carcharodon arnoldi Jordan.

Jordan, D. S. 1907 A, 113, fig. 13.
Arnold and Anderson 1910 A, 130, 133, 329.
Hay, O. P. 1927 D, 174.
Ishiwara, Y. 1921 A, 67, pl. xii, figs. 3, 4.
Jordan, D. S. 1910 B, 182.
1922 B, 340.
1926 B, 258.
Jordan and Beal 1913 A, 245, 252.
Jordan and Gilbert 1919 A, 22, 62.
1920 A, 9.
Jordan and Hannibal 1923 A, 55, 62, pl. i, fig. *f*; pl. vi, fig. *j*.
Leriche, M. 1908 C, 304 (Syn. of C. rondeleti).
Miocene (Monterey): Pliocene (San Diego): Pleistocene (San Pedro); all in California.

Carcharodon branneri Jordan.

Jordan, D. S. 1907 A, 116, fig. 15.
Anderson, F. M. 1911 A, 10.
Hay, O. P. 1927 D, 174.
Jordan, D. S. 1926 B, 258.
Jordan and Gilbert 1919 A, 22 (Syn. of C. megalodon).
Jordan and Hannibal 1923 A, 53, pl. vi, fig. *f*; pl. v, fig. *a*.
Leriche, M. 1908 C, 304 (Syn. of C. megalodon).
Miocene (Monterey); California, Lower California, South Carolina, Florida: Pliocene (Purissima); California: Pleistocene (San Pedro); California.

Carcharodon carcharias (Linn.).

Hay, O. P. 1902 A, 308.
Arldt, T. 1923 A, 485 (C. rondeletii).
Bassani, F. 1905 A, 13, pl. i (C. rondeleti).
Chapman, F. 1918 A, 20, pl. vi, fig. 22; pl. viii, figs. 1, 2 (C. rondeletii).
Garman, S. 1913 A, 32, pl. v, figs. 5-9.
Haswell, W. A. 1884 A, 83, pl. i (C. rondeleti).
Ishiwara, Y. 1921 A, 68, pl. xii, fig. 5.
Jordan, D. S. 1905 A, 538.
1907 B, 195.
1910 B, 182.
1922 B, 340, fig. 1*d*. (This species?).
Jordan and Beal 1913 A, 252.
Jordan and Gilbert 1882 A, 30.
Radcliffe, L. 1916 A, 247, pl. xxxviii.
Smith, H. M. 1916 A, 341, fig.
Stefano, G. 1901 A, 558 (C. rondeleti).
1912 B, 43, pls. i, ii (C. rondeleti).
Stevenson, W. G. 1884 A, 83, pls. i, ii.
1884 B, 140, pl. i, text-fig. 1.
Recent, in all temperate and tropical seas: Miocene?, Pliocene?, Pleistocene?; California.

Carcharodon contortidens Emmons.

Hay, O. P. 1902 A, 308.
Eocene; North Carolina.

Carcharodon lanciformis Gibbes.

Hay, O. P. 1902 A, 308.
Eastman, C. R. 1906 E, 82, pl. ii, figs. 13, 19-22.
Jordan and Hannibal 1923 A, 57.
Phosphate beds; South Carolina.

Carcharodon leptodon Agassiz.

Hay, O. P. 1902 A, 308 (This species?).
Eocene; South Carolina.

Carcharodon leviathan Jordan and Hannibal.

Jordan and Hannibal 1923 A, 55, pls. vii, viii.
Hay, O. P. 1927 D, 174, 187.
Jordan, D. S. 1922 B, 338, figs. 1-3 (C. branneri).
1925 B, 49.
1926 B, 258.
Pleistocene (Lomita, La Brea); California.

Carcharodon megalodon Agassiz.

Agassiz, L. 1843 B (1835), pl. xxix, figs. 1-7 (Carcharias).
Hay, O. P. 1902 A, 308.
Abel, O. 1922 C, 237, fig. 197 and frontispiece.
Ameghino, F. 1904 B, 11.
1906 A, 185, 259.
1908 B, 481.
Arldt, T. 1907 D, 596.
Bassani, F. 1891 A, 14, pl. i, figs. 1, 2.
Binney, E. W. 1879 A, 118 (Carcharias vulgaris).
Blake, C. C. 1862 C, 316.
Blake, J. H. 1873 A, 172 (C. subauriculatus).
1874 A, 270 ("Carcharodon").
Chapman, F. 1918 A, 19, pl. ii, figs. 1-3.
Coulon, L. 1903 A, 127.

Croom, H. B. 1835 A, 170 ("shark").
Dean, B. 1909 A, 233, pl.
Eastman, C. R. 1903 A, 186, pl. i, figs. 21-23.
1904 H, 82, pl. xxxi, figs. 1-4.
1906 E, 82, pl. ii, fig. 23.
Gaudry, A. 1906 B, 114.
Gervais, P. 1852 A, explan. pls. lxxiv, lxxv.
1859 A, 520, 521, pl. lxxiv, figs. 10-12, 16.
Giebel, C. G. 1855 A, 116, pl. xlvii, fig. 18.
Hansemann, D. 1910 A, 387.
Harlan, R. 1834 B, 89 ("shark," in part).
Hay, O. P. 1922 B, 3.
1927 D, 187.
Hennig, E. 1914 A, 307, pl. xxiii, fig. 8 (This species?).
Hussakof, L. 1912 C, 224, 2 figs.
Jaekel, O. 1902 E, 1078.
Jordan, D. S. 1905 A, 1, 538, fig. 332.
1907 A, 116.
1907 B, 195, fig. 138.
1910 B, 182.
1922 B, 338.
Jordan and Beal 1913 A, 245, 251.
Jordan and Gilbert 1919 A, 22.
Jordan and Hannibal 1923 A, 54 (C. megalodon, C. mortoni).
Lawley, R. 1878 A, 334.
Lankester, E. R. 1905 A, 26, 51, fig. 192a.
Leriche, M. 1906 A, 304.
1908 C, 304 (C. riversi, in part, and C. branneri as syns.).
Lucas, F. A. 1901 J, 65.
Lyell, C. 1845 A, 415 (Carcharias).
1845 C, 549, 560 (C. megalodon, C. productus).
McLenahan, S. 1852 A, 71 ("whale," in part).
Manigault, G. E. 1887 A, 131, pl. i.
Newton, E. T. 1891 A, 103, pl. ix, figs. 13*a*, 13*b*.
Owen, R. 1839 G, 212 (Carcharias).
1845 B, 34 (Carcharias).
1868 A, 870.
Priem, F. 1912 A, 215, 218, 227, 239, pl. vii, figs. 8, 9.
1914 A, 122, pl. iii, fig. 4.
Serres, M. 1852 A, 116.
Shattuck, G. B. 1904 A, xcvi.
Stefano, G. 1912 A, 360, pls. xiii, xiv.
1912 B, 41, pls. i, ii.
Sternberg, C. H. 1911 A, 71.
Underhill, B. M. 1910 A, 77.
Weiler, W. 1922 A, 92, pl. ii.
Woodward, A. S. 1922 C, 72, fig. 73.
Zittel and Schlosser 1923 A, 58, fig. 91.
Miocene (Calvert); Maryland, Virginia, South Carolina?, California.

Carcharodon morricei Jordan.

Jordan, D. S. 1926 B, 259, pl. xxvi, fig. 2.
Lower Miocene (Temblor); California.

Carcharodon polygurus (Morton).

Hay, O. P. 1902 A, 308 (*C. megalodon*, including *C. polygurus*, by error *C. polygyrus*).
Fowler, H. W. 1911 A, 61, fig. 27.
Ishiwara, Y. 1921 A, 65 (C. polygyrus, syn. of C. megalodon).
Sellards, E. H. 1915 D, 99, fig. 28 ("Carcharodon").
Upper Cretaceous (Manasquan?); New Jersey: Eocene (Shark River?); New Jersey, Delaware: Eocene (Pamunkey); Virginia: Miocene? New Jersey: Miocene or Pliocene, Florida.

Carcharodon purplei Jordan and Hannibal.

Jordan and Hannibal 1923 A, 56, 63, pl. v, fig. *g*; pl. vi, fig. *b*.
Hay, O. P. 1927 D, 174.
Jordan, D. S. 1926 B, 260.
Pliocene (San Diego); California.

Carcharodon riversi Jordan.

Jordan, D. S. 1907 A, 115, fig. 14.
Hay, O. P. 1927 D, 174.
Ishiwara, Y. 1921 A, 67.
Jordan, D. S. 1910 B, 182 (Syn. of C. carcharias?).
1922 B, 340, fig. 1*b*.
1926 B, 260.
Jordan and Beal 1913 A, 245, 252 (Syn. of C. arnoldi).
Jordan and Hannibal 1923 A, 56, 63, pl. v, fig. *b*.
Leriche, M. 1908 C, 104 (Syn. of C. rondeletii).
Pliocene or Pleistocene (San Diego); California.

Carcharodon tembloris Jordan.

Jordan, D. S. 1926 B, 258, pl. xxvi, figs. 1, 3.
Lower Miocene (Temblor); California.

Carcharodon sp. indet.

Undetermined teeth of *Carcharodon* have been reported as follows:
Hay, O. P. 1923 A, 370. Pleistocene; Florida.
Merriam, J. C. 1915 E, 197, fig. 22. California.
Osborn, H. F. 1918 A, 23. Miocene (Temblor); California.
Sellards, E. H. 1915 D, 98, fig. 28. Florida.
Tuomey, M. 1848 A, 160, 165, 166, 178, 180. Tertiary; South Carolina.
Uhler, P. H. 1892 A, 205, 206. Massachusetts.

CARCHAROCLES Jordan and Hannibal. Type *Carcharodon auriculatus* (Blainville).

Jordan and Hannibal in Jordan, D. S. 1923 A, 99.
Jordan, D. S. 1923 A, 99.
Jordan and Hannibal 1923 A, 56.

Carcharocles auriculatus (Blainville).

Unless otherwise indicated the authors, as cited, refer this species to *Carcharodon*.
Hay, O. P. 1902 A, 307.
Ameghino, F. 1904 B, 11, fig. 3.
1906 A, 181, pl. ii, fig. 21.
1908 B, 481.
Bassani, F. 1891 A, 19, pl. ii, figs. 24, 25.
1895 A, 6, pl.
Chapman, F. 1918 A, 18, 32, pl. i, figs. 4-7.
Clark and Miller 1912 A, 117, 118.
Coulon, L. 1903 A, 127 (C. disauris).
Deuesen, A. 1924 A, 86.

Eastman, C. R. 1901 B, 108.
Fowler, H. W. 1911 A, 59, fig. 26.
Gervais, P. 1852 A, explan. pls. lxxiv, lxxv (Carcharodon disauris).
1859 A, 520, pls. lxxiv, lxxv (C. disauris).
Hay, O. P. 1922 B, 3.
Jordan, D. S. 1923 A, 99 (To Carcharocles).
Jordan and Hannibal 1923 A, 57 (Carcharodon acutidens).
Leriche, M. 1905 A, 130, 189, 208.
1906 B, 353, 355.
1906 C, 411 (C. auriculatus); 414 (C. disauris).
Lucas, F. A. 1901 J, 66.
Priem, F. 1906 A, 199, pl. viii, fig. 13.
Sellards, E. H. 1913 A, pl. vi, figs. 1-4 ("shark").
Stefano, G. 1912 A, 358, pls. xiii, xiv (Carcharodon).
1912 B, 39, 40, pls. i, ii (Carcharodon auriculatus, C. angustidens).
Storms, R. 1901 A, 261, pl. vii, figs. 5-16 (C. auriculatus); 267 (C. turgidus).
Stromer, E. 1905 C, 173.
1905 E, 315.
Woodward, A. S. 1889 I, 11 (Carcharodon).
Upper Cretaceous (Manasquan, etc.); New Jersey: Eocene (Shark River); New Jersey: (Nanjemoy); Maryland, Virginia: (Fayette); Texas: Miocene (Shiloh); New Jersey.

Carcharocles rectus (Agassiz).

Hay, O. P. 1902 A, 308 (Carcharodon).
Anderson, F. M. 1911 A, 101 (Carcharodon).
Arnold, R. 1907 A, 153 (Carcharodon).
Blake, W. P. 1857 A, 172 (Carcharodon).
Gabb, W. P. 1865 A, 174 (Carcharodon).
Jordan, D. S. 1907 A, 112 (Carcharodon).
1910 B, 182 (Carcharodon).
Jordan and Beal 1913 A, 245, 248, 252 (Carcharodon).
Jordan and Gilbert 1919 A, 22 (Carcharodon).
Jordan and Hannibal 1923 A, 57, pl. i, figs. *a-f*, *i-j* (Carcharocles).
Miocene (Monterey); California.

Corax Agassiz. Type *Galeus pristodontus* Morton.

Hay, O. P. 1902 A, 309.
Ameghino, F. 1906 A, 182, 186.
Arldt, T. 1923 A, 484.
Bronn, H. G. 1848 A, 333.
1849 A, 642.
Chapman, F. 1909 A, 452.
Coulon, L. 1903 A, 128.
Fowler, H. W. 1911 A, 62.
Giebel, C. G. 1855 A, 117.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1905 A, i, 542.
1907 B, 195, 199.
1919 B, 214.
1923 A, 99.
Leriche, M. 1902 B, 119.
1906 C, 413.
Priem, F. 1908 B, 20, fig. 10.
Sauvage, H. E. 1867 A, 124.
Winckler, T. C. 1876 A, 10.
Woodward, A. S. 1917 D, lxxiv.
1912 A (1911), 196, text-fig. 57.
Zittel and Koken 1911 A, 52.
Zittel and Schlosser 1923 A, 58.

Corax curvatus Williston.

Hay, O. P. 1902 A, 309.
Cretaceous (Benton); Kansas.

Corax falcatus Agassiz.

Hay, O. P. 1902 A, 309 (C. falcatus); 311 (Galeocerdo hartwellii).
Ameghino, F. 1906 A, 71.
Berry, E. W. 1916 A, 354, pl. ix, fig. 2.
Cockerell, T. D. A. 1908 C, 162 (C. falcatus); 161 (Galeocerdo hartwellii).
Coulon, L. 1903 A, 128 (C. appendiculatus).
Fowler, H. W. 1911 A, 63, fig. 28.
Gidley, J. W. in Veatch and Stephenson 1911 A, 208, 215.
1926 E, 16.
Giebel, C. G. 1855 A, 117, pl. xlvii, figs. 13, 17 (C. heterodon).
Hennig, E. 1914 A, 307, pl. xxiii, fig. 6 (C. heterodon).
Hussakof, L. 1908 A, 29, fig. 6.
Leriche, M. 1902 B, 121, pl. iii, figs. 76-78.
1906 B, 348.
1906 C, 415.
Priem, F. 1907 A, 463, figs. 3, 6.
1912 B, 269.
1913 A, 161.
Sauvage, E. 1867 A, 124.
Stephenson, L. W. 1912 A, 127, 130, 136, 148.
1918 A, 153, 157.
Woodward, A. S. 1912 A (1911), 198, pl. xlii, figs. 16-28; text-fig. 59.
Cretaceous; Europe: Upper Cretaceous (Ripley); Georgia: (Niobrara); Kansas, New Mexico, Texas, Wyoming: (Manasquam, etc.); New Jersey: (Matawan); Maryland.

Corax pristodontus Agassiz.

Hay, O. P. 1902 A, 309.
Berry, E. W. 1916 A, 352, pl. ix, fig. 1.
Fowler, H. W. 1911 A, 64, fig. 29.
Leriche, M. 1902 B, 119, pl. iii, figs. 66-75.
1906 B, 348.
1906 C, 420.
Lyell, C. 1844 A, 303 (Galeus).
Mantell, G. A. 1844 A, 626, fig. 130 (Galeus).
Merrill, G. P. 1907 A, 11 (Galeocerdo).
Morton, S. G. 1834 A, 31, pl. ii, fig. 6 (Squalius sp.).
Priem, F. 1896 B, 17, pl. ii, figs 11-13.
1912 B, 269.
1914 C, 367, pl. x, fig. 17.
Spillman, W. 1863 A (C. appendiculatus).
Todd, J. E. 1908 A, 194.
Tuomey, M. 1848 A, 166 ("Corax").
Woodward, A. S. 1912 A (1911), 197, pl. xlii, figs. 12-15; text-fig. 58.
Upper Cretaceous; Old World: Upper Cretaceous (Manasquan, etc.); New Jersey:

(Matawan, Monmouth); Maryland: Eocene; Alabama, Mississippi, South Carolina: Miocene; Virginia.

Corax sp. indet.

Gidley, J. W. 1926 F, 192, pl. lxii, fig. 11.
Upper Cretaceous (Ripley); Tennessee.

PSEUDOCORAX Priem. Type *Corax affinis* Agassiz.

Priem, F. 1897 A, 46.
Leriche, M. 1902 B, 122.

Pseudocorax affinis (Agassiz).

Hay, O. P. 1902 A, 309 (Corax).
Leriche, M. 1902 B, 122, pl. iii, figs. 79-86.
1906 C, 80, 411.
Priem, F. 1897 A, 46, pl. i, figs. 20-27.
1898 B, 400, pl. x, fig. 8.
Woodward, A. S. 1912 A (1911), 201, pl. xliii, figs. 4-9 (Corax).
Upper Cretaceous; Europe: Eocene; Alabama?

XENODOLAMIA Leidy. Type *X. pravus* Leidy.

Hay, O. P. 1902 A, 301 (Xiphodolamia); 309 (Xenodolamia).
Fowler, H. W. 1911 A, 25 (Xiphodolamia).
Jordan, D. S. 1923 A, 99 (Xenodolamia, Xiphodolamia).
Jordan and Hannibal 1923 A, 42, 45, 48, 58 (Xiphodolamia).
Leriche, M. 1905 A, 183 (Xenodolamia); 184 (Xiphodolamia).
1906 C, 199, figs. 42-48 (Xiphodolamia a syn.).
Eastman, C. R. 1904 H, 77 (Xiphodolamia).
Fowler, H. W. 1911 A, 26, fig. 2 (Xiphodolamia).
Upper Cretaceous (Manasquan, etc.); New Jersey.

Xenodolamia ensis Leidy.

Hay, O. P. 1902 A, 301 (Xiphodolamia).

Xenodolamia pravus Leidy.

Hay, O. P. 1902 A, 309.
(Phosphate beds); South Carolina.

Xenodolamia simplex Leidy.

Hay, O. P. 1902 A, 309.
(Phosphate beds); South Carolina.

Superfamily GALEOIDÆ, new form.

Hay, O. P. 1902 A, 301 (Galeoidea).
Arldt, T. 1923 A, 484 ("galeoiden").
Beer, G. R. 1924 B, 60 (Scyllioidei).
Fowler, H. W. 1911 A, 29 (Galei).
Garman, S. 1913 A, 10, 12 (Carcharinoidei).
Gill, T. 1873 F, 12 (Galeorhinoidea).
1882 A, 967 (Anarthri or Galei).
1885 A, lxiv (Anarthri).
Goodrich, E. S. 1909 A, 148 (Scyllioidei).
Gregory, W. K. 1907 D, 446 (Scylliorhinoidea).
Jordan, D. S. 1905 A, i, 525; ii, 558 (Asterospondyli).
1907 B, 186, 189, 758 (Asterospondyli, Galei).
1923 A, 100 (Galeoidei).
Pompeckj, J. F. 1913 A, 1127 (Galeoidei).
Rauther, M. 1913 A, 1098 (Galeoidei).
Regan, C. T. 1906 A, 723, 741 (Galeoidei).
1908 D, 347 (Galeoidei).
Ridewood, W. G. 1921 A, 313 (Galeoidei).
Van Wijhe, J. W. 1922 A, 291 (Galeoidei).

GINGLYMOSTOMIDÆ Gill.

Gill, T. 1872 C, 24.
Hay, O. P. 1902 A, 310 (Ginglymostominæ).
Fowler, H. W. 1911 A, 29 (Ginglymostomidæ).
Garman, S. 1913 A, 43 (Orectolobidæ).
Gill, T. 1862 A, 406 (Ginglymostomatoidæ).
Goodrich, E. S. 1909 A, 149 (Orectolobinæ).
Jordan, D. S. 1905 A, i, 533 (Ginglymostomidæ).
Jordan, D. S. 1907 B, 190, 758 (Ginglymostomidæ).
1923 A, 98 (Ginglystomidæ, *errore?*).
Mayer, P. 1886 A, 275 ("scylliolamniden").
Radcliffe, L. 1916 A, 248 (Orectolobidæ).
Regan, C. T. 1906 A, 723 (Orectolobidæ).
Stromer, E. 1905 C, 165, 179 (Scylliolamnidæ).
Zittel, K. A. 1890 A, 80 (Scylliolamnidæ).

GINGLYMOSTOMINÆ Gill.

Hay, O. P. 1902 A, 310.

GINGLYMOSTOMA Müller and Henle. Type *Squalus cirratus* Gmelin.

Hay, O. P. 1902 A, 310.
Arldt, T. 1923 A, 485.
Bridge, T. W. 1904 A, 447.
Duméril, A. 1856 A, 121 ("ginglymostome").
Fowler, H. W. 1911 A, 30.
Garman, S. 1913 A, 43, 54.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1919 C, 190.
1923 A, 98.
Jordan and Gilbert 1882 A, 18.
Leriche, M. 1906 C, 415.
Mayer, P. 1886 A, 275.
Müller and Henle 1838 A, 35.
Priem, F. 1904 A, 288.
1908 B, 94, fig. 51.
1914 A, 121.
Radcliffe, L. 1916 A, 248, pl. xxxix.
Regan, C. T. 1906 A, 736, fig. 116.
1908 D, 348, 350.
Ridewood, W. G. 1921 A, 342, 366, fig. 18.

Schlosser, M. 1917 A, 143.
Stromer, E. 1905 C, 165.
Zittel and Schlosser 1923 A, 56, fig. 79.

Ginglymostoma obliquum (Leidy).
Hay, O. P. 1902 A, 310.
Fowler, H. W. 1911 A, 30, fig. 4.
Eocene; New Jersey.

Ginglymostoma serra (Leidy).
Hay, O. P. 1902 A, 310.
Eocene; South Carolina.

SCYLIORHINIDÆ Regan.

Regan, C. T. 1906 A, 723, 741, 745.
Unless otherwise indicated the authors, as quoted, use for this family the name Scylliidæ.
Hay, O. P. 1902 A, 310 (Scylliorhinidæ).
Allis, E. P. 1913 A, 322.
1914 A, 359.
1923 B, 145.
1926 B, 338.
Arldt, T. 1907 D, 283 (Scyllidæ).
1923 A, 486 ("scylliorhiniden").
Bonaparte, C. L. 1840 A, 46 (Scyllini).
Braus, H. 1899 A, 521 ("scyllidæ").
1906 A ("scylliiden").
Bridge, T. W. 1904 A, 446.
Carus, V. 1875 A, 601.
Cope, E. D. 1891 N, 17 (Scyllidæ).
Cunningham, J. T. 1912 A, 246.
Dollo, L. 1889 F, 341.
1904 C, 50.
Fitzinger, L. J. 1873 A, 55 (Scyllia).
Gegenbaur, C. 1870 B, 449 ("scyllien").
Gill, T. 1905 A, 658 (Scylliorhinidæ).
Müller and Henle 1838 A, 34 (Scyllia).
Goodrich, E. S. 1909 A, 149 (Scylliorhinidæ).
Gregory, W. K. 1907 D, 446 (Scylliorhinidæ).
Günther, A. C. 1881 A, 685.
Hay, O. P. 1901 B, 67 (Scylliorhinidæ).
Huber, O. 1901 A, 612 (Scyllidæ).
Imms, A. D. 1905 A, 44.
Jordan, D. S. 1905 A, I, 532; II, 591 (Scylliorhinidæ).
1907 B, 189, 758 (Scylliorhinidæ).
Jordan, D. S. 1923 A, 98 (Scylliorhinidæ).
Jordan and Gilbert 1882 A, 17, 58.
Kingsley, J. S. 1885 A, 83.
Kryzanovsky, S. 1916 A, 235 (Pristiurus).
Leigh-Sharpe, W. H. 1926 A, 339.
Leunis and Ludwig 1883 A, 785.
Mayer, P. 1886 A, 253, 273.
Owen, R. 1868 A, 13.
Pompeckj, J. F. 1913 A, 1127.
Priem, F. 1904 A, 288 (Scyllidæ).
1908 B, 95 ("scyllidés").
Rabinerson, A. 1925 A, 436, 453 ("scylliiden").
Rabl, C. 1901 A, 523 ("scyllien").
Rauther, M. 1913 A, 1098.
Regan, C. T. 1906 A, 723, 741, 745 (Scyliorhinidæ).
1908 A, 453 (Scyliorhinidæ).
1912 A, 837 (Scyliorhinidæ).
Ridewood, W. G. 1921 A, 362.
Roth, W. 1911 A, 534.
Sagemehl, M. 1883 A, 225 ("scyllien").
Schlosser, M. 1917 A, 137, 139, 141 ("scylliden").
Schmalhausen, J. J. 1913 C (Scyllidæ).
Stromer, E. 1905 C, 164, 179.
1912 A, 19.
Van Wijhe, J. W. 1922 A, 292 (Scyllidæ).
Wallace, A. R. 1876 A, ii, 461 (Scyllidæ).
White, J. W. 1905 A, 321 (Scyllidæ).
Woodward, A. S. 1898 B, 46 (Scyllidæ).
1912 A (1911), 193.
Zittel and Koken 1911 A, 50 (Scyllidæ).
Zittel and Schlosser 1923 A, 56 (Scyllidæ).

SCYLIORHININÆ new form.

Hay, O. P. 1902 A, 310 (Scylliorhininæ).
Gill, T. 1862 A, 407 (Scylliorhininæ).
Goodrich, E. S. 1909 A, 149 (Scylliorhininæ).

SCYLIORHINUS Blainville. Type *Squalus canicula* Lacepède.

Unless otherwise indicated the authors, as quoted, use the name *Scyllium* for this genus.
Blainville, H. M. D. 1816, Bull. Soc. Philomat., 121 (Scyliorhinus).
Hay, O. P. 1902 A, 310 (Scylliorhinus).
Abel, O. 1919 A, 29, 107, figs. 6, 66.
Allis, E. P. 1915 A.
1917 A, 108.
1926 A, 164.
Arldt, T. 1923 A, 486 (Scyllium, Scylliorhinus).
Beer, G. R. 1922 A, 459.
1924 C, 289, figs. 1-4, 5-10.
Bolk, L. 1914 A, 4.
Braus, H. 1906 A.
Bridge, T. W. 1904 A, 446, 755.
Bronn, H. T. 1848 B, 112.
1849 A, 645.
Cartier, O. 1875 A, 67, pl. iv, fig. 3.
Cunningham, J. T. 1912 A, 244.
Daniel, J. F. 1922 A, figs. 21*b*, 22, 72, 77, 142.
Davidoff, M. 1879 A.
Derjugin, K. 1910 A, 587.
Dombrowsky, B. A. 1918 A, 199, fig. 2.
Duméril, A. 1856 A, 120 ("roussette").
Edgeworth, F. H. 1907 A, 524.
1925 A, 238, figs. 1-20.
1926 A, 176, fig. 1.
Elliot, A. I. M. 1907 A, 648.
Fahrenholz, C. 1915 A, 400.
Fürbringer, K. 1902 A, 158.
1903 A, 393.
Garman, S. 1913 A, 3 (Scyliorhinus); 71 (Catulus in part); 96 (Apristurus).
Gaupp, E. 1905 D, 880.
Gegenbaur, C. 1870 B, 450, pl. xv, figs. 4-6.
1870 C, 407.
Gibian, A. 1912 A.
Giebel, C. G. 1855 A, 117.

Goodrich, E. S. 1904 A, 484, fig. 1.
1906 A, 345, figs. 1-3.
1909 A, 149, 516, fig. 1.
1918 A, 1, pls. i, ii; text-fig. 1.
Haller, G. 1923 A, 96, fig. 20.
Hay, O. P. 1901 B, 67 (Scylliorhinus).
Heilprin, A. 1887 A, 294, 299, 300.
Huber, O. 1901 A, 612.
Huxley, T. H. 1876 E, 113, fig. 10.
Ihering, H. 1878 A, 74.
Jacobshagen, E. 1923 A, 178.
Jaekel, O. 1901 A, 552.
1909 D, 722.
Jordan, D. S. 1907 B, 190 (Scylliorhinus).
1923 A, 98 (Scylliorhinus).
Jordan and Gilbert 1882 A, 58, 869 (Scylliorhinus).
Jordan and Evermann 1917 A, 95 (Scylliorhinus).
Killian, G. 1891 A, 85, figs. 1-24.
Kingsbury, B. F. 1926 A, 98-104 (Scyllium).
Kingsley, J. S. 1925 A, 228, fig. 241.
Klaatsch, H. 1890 A, 120, 175, pls. vi, vii.
Kner, R. 1860 B, 816.
Leigh-Sharpe, W. H. 1921 A, 359.
1926 A, 322, 339, figs. 1-10.
Leriche, M. 1906 C, 421.
Leunis and Ludwig 1883 A, 785.
Lubosch, W. 1909 A, 3.
Matthes, E. 1921 A, 216.
Mayer, P. 1886 A, 224.
Meek, A. 1916 A, 39, 40 (Scylliorhinus).
Mivart, St. G. 1878 B, 311, 332.
Müller and Henle 1838 A, 34.
Norman, E. W. 1926 A, 413 (Scyliorhinus).
Owen, R. 1845 B, 27, 29.
1848 B, 87.
1866 A, 33, 35.
Pouchet, G. 1878 A, 148, pl. iv.
Priem, F. 1908 B, 77, 106.
Probst, J. 1886 B, 308.
Rabinerson, A. 1925 A, 436, 520, 561.
Rabl, C. 1892 A, 109.
1901 A, 523.
Regan, C. T. 1906 A, 730, 735 (Scyliorhinus).
1908 A, 453 (Scyliorhinus).
Reynolds, S. H. 1897 A, 71, 114, 119, 130, figs. 6-8.
Ridewood, W. G. 1895 B, 425, fig. 1.
1896 A, 383.
1899 A, 47, figs. 1, 2.
1921 A, 326, 328, 362, figs. 15, 16.
Roth, W. 1911 A, 534, pls. vi, vii.
Ryder, J. 1886 A, 74.
Sabatier, A. 1898 A, 929.
1903 B, 1217.
Salensky, W. 1899 B, 304.
Schauinsland, H. 1906 A, 395, fig. 1.
Schmalhausen, J. J. 1912 A, 510.
1913 B, 745.
1913 C, pl. i.
1916 C, 214, fig. 6.
Sečerov, S. 1911 A, 8, pl. i.
Sewertzoff, A. N. 1926 D, 87, fig. 16.
Sewertzoff and Disler 1924 A, 347 (Sciliorhinus).
Shann, E. W. 1919 A, 533.
Solger, B. 1880 B, 466.
Stannius, H. 1854 A, 89.
Steinhard, O. 1903 A, 16.
Tomes, C. S. 1876 A, 266, pl. xxxi.
1898 B, 444.
Van Wijhe, J. W. 1922 A, 276, 291.
White, J. W. 1905 A, 319.
White, P. J. 1896 A, 158.
Williston, S. W. 1905 B, 347 (Scylliorhinus).
Woodward, A. S. 1912 A (1911), 194.
Ziegler, H. E. 1923 A, 66, fig. 3.
Zittel and Schlosser 1923 A, 56, fig. 78.

Scyliorhinus? gracilis (Willist.).

Hay, O. P. 1902 A, 310 (Scylliorhinus).
Merrill, G. P. 1907 A, 20 (Scylliorhinsis).
Cretaceous (Greenleaf); Kansas.

Scyliorhinus planidens (Willist.).

Hay, O. P. 1902 A, 310 (Scylliorhinus).
Merrill, G. P. 1907 A, 20 (Scylliorhinsis).
Cretaceous (Greenleaf); Kansas.

Scyliorhinus rugosus (Willist.).

Hay, O. P. 1902 A, 310 (Scylliorhinus).
Merrill, G. P. 1907 A, 20 (Scylliorhinsis).
Cretaceous (Greenleaf); Kansas.

GALEIDÆ Hoernes ?

Hoernes, R. 1886 A, 542 (earliest?).
Hay, O. P. 1902 A, 310 (Galeidæ).
Abel, O. 1919 A, 121 (Carchariidæ).
Allis, E. P. 1914 A, 359 (Carchariidæ).
Arldt, T. 1923 A, 486 ("carchariiden").
Braus, H. 1906 A, 182 ("carchariiden").
Bridge, T. W. 1904 A, 448 (Carchariidæ).
Carus, V. 1875 A, 600 (Carchariidæ).
Dollo, L. 1889 F, 342 (Carchariidæ).
1904 C, 48 (Carchariidæ).
Eastman, C. R. 1901 B, 108 (Carchariidæ).
Fahrenholz, C. 1915 A, 402 (Carcharias).
Fitzinger, L. J. 1873 A, 55 (Galei).
Fowler, H. W. 1911 A, 66 (Galeorhinidæ).
Gill, T. 1872 A, 24 (Galeorhinidæ).
Goodrich, E. S. 1909 A, 150 (Carchariidæ).
Gregory, W. K. 1907 D, 447 (Galeidæ).
Hay, O. P. 1901 B, 67 (Galeidæ).
Hoernes, R. 1886 A, 541 (Carchariidæ); 542 (Galeidæ).
Huber, O. 1901 A, 624 (Galeidæ).
Imms, A. D. 1905 A, 43 (Carchariidæ).
Jordan, D. S. 1905 A, i, 540; ii, 561 (Carchariidæ).
1907 B, 197, 758 (Carchariidæ).
1923 A, 100 (Galeidæ).
Laaser, P. 1900 A, 480 (Mustelus).
Leriche, M. 1906 C, 165 (Carchariidæ).
Leunis and Ludwig 1883 A, 783 (Carchariidæ).
Rabinerson, A. 1925 A (Carchariidæ).
Radcliffe, L. 1916 A, 267 (Galeorhinidæ).
Rauther, M. 1913 A, 1098 (Carchariidæ).
Regan, C. T. 1906 A, 723, 746 (Carchariidæ).
Ridewood, W. G. 1895 B, 429 (Carchariidæ).
1921 A, 313, 330, 351, 395 (Carchariidæ).
Schlosser, M. 1917 A, 145 ("carchariiden").

Schmalhausen, J. J. 1913 A, 24 (Carchariidæ).
Steinman, G. 1907 A, 401 (Carchariidæ).
Stromer, E. 1905 C, 174, 180 (Carchariidæ).
Terra, P. 1911 A, 201 (Galeidæ, Carchariidæ).
Woodward, A. S. 1889 I, 12 (Carchariidæ).
Zittel and Koken 1911 A, 51 (Carchariidæ).
Zittel and Schlosser 1923 A, 56 (Carchariidæ).

GALEINÆ Jordan and Evermann.

Jordan and Evermann 1896 A, 27.

GALEUS Rafinesque. Type *Squalus mustelus* Linn.

Rafinesque, C. S. 1910, Car. Alc. Nuov. Gen., 13.
Hay, O. P. 1902 A, 312 (Galeorhinus).
Abel, O. 1919 A, 121, fig. 80.
Allis, E. P. 1913 A, 326.
1922 B, 198.
1923 B, 145.
Arldt, T. 1923 A, 486.
Beer, R. G. 1922 A, 471.
Bridge, T. W. 1904 A, 449.
Davidoff, M. 1879 A.
Dollo, L. 1904 C, 48.
Duméril, A. 1856 A, 126 ("milandre").
Edgeworth, F. H. 1926 A, 189.
Fahrenholz, C. 1915 A, 402.
Garman, S. 1913 A, 169 (Galeorhinus).
Gaupp, E. 1905 D, 884.
Gegenbaur, C. 1870 C, 407.
Gibian, A. 1912 A, 60.
Haswell, W. A. 1884 A, 84.
Hay, O. P. 1901 B, 67 (Galeorhinus).
Imms, A. D. 1905 A, 44.
Jacobshagen, E. 1923 A, 176.
Jordan, D. S. 1905 A, i, 541.
1917 A, 78.
1923 A, 100.
Jordan and Beal 1913 A, 247.
Jordan and Evermann 1917 A, 78.
Jordan and Gilbert 1882 A, 21 (Galeorhinus).
Leigh-Sharpe, W. H. 1921 A, 359, figs. 1-4 (Galeorhinus).
Leigh-Sharpe, W. H. 1926 A, 340.
Leydig, F. 1852 A.
Locy, W. A. 1894 A, 171.
Müller and Henle 1838 A, 36.
Nauck, E. T. 1926 B, 78, fig. 18.
Owen, R. 1845 B, 24, 35, 39.
1848 B, 87.
Priem, F. 1904 A, 291.
1908 B, 97.
Rabinerson, A. 1925 A, 520.
Radcliffe, L. 1916 A, 267, fig. 19.
Reynolds, S. H. 1897 A, 108, 118, fig. 15.
Ridewood, W. G. 1895 B, 432.
1899 A, 52.
Sečerov, S. 1911 A, 8, 10, pl. i.
Stannius, H. 1854 A.
Steinhard, O. 1903 A, 17, 34 (Galeorhinus).
Stromer, E. 1925 A, 20.
Tomes, C. S. 1898 B, 446, pl. xvii.
Weiler, W. 1922 A, 103, pls. i, ii.
Whitehouse, R. H. 1910 C, 138.
Williamson, W. C. 1851 A, 676.
Woodward, A. S. 1889 I, 12.
Zittel and Schlosser 1923 A, 56.

Galeus sp. indet.

Hay, O. P. 1902 A, 312 (Galeorhinus).
Woodward, A. S. 1889 D, 456 (Galeus).
Eocene; Alabama.

GALEORHININÆ Gill.

Gill, T. 1862 A, 399, 409 (earliest?).
Hay, O. P. 1902 A, 311.
Goodrich, E. S. 1909 A, 151 (Carchariinæ).
Jordan and Evermann 1896 A, 27.
Jordan and Gilbert 1882 A, 19.

GALEOCERDO Müller and Henle. Type *G. tigrinus* M. and H.

Hay, O. P. 1902 A, 311.
Agassiz, L. 1874 A, 131.
Allis, E. P. 1909 A, 202 (Galeus).
1915 A, 584 (Galeus).
1919 C, 257 (Galeus).
Ameghino, F. 1906 A, 186.
Bassani, F. 1891 A, 35.
Bronn, H. G. 1848 A, 52 (Galeocerdo); 524 (Galeus).
1849 A, 644.
Coulon, L. 1903 A, 129.
Dollo, L. 1904 C, 48.
Duméril, A. 1856 A, 129.
Eastman, C. R. 1901 B, 109.
Fowler, H. W. 1911 A, 66.
Garman, S. 1913 A, 148.
Giebel, C. G. 1855 A, 117.
Hay, O. P. 1901 B, 67.
Heilprin, A. 1887 A, 297, 300.
Jordan, D. S. 1905 A, i, 541; ii, 571.
1907 B, 198.
1919 B, 192.
1923 A, 100.
Jordan and Gilbert 1882 A, 21.
Jordan and Hannibal 1923 A, 38.
Klaatsch, H. 1890 A, 121.
Lawley, R. 1881 A, pls.
Leriche, M. 1906 C, 415.
1910 D, 295, fig. 95 (Galeus); 301 (Galeocerdo).
Mayer, P. 1886 A, 275.
Müller and Henle 1838 A, 36.
Priem, F. 1908 B, 80, 108.
Radcliffe, L. 1916 A, 250, 261, pl. xlii; text-fig. 16.
Regan, C. T. 1906 A, 736, fig. 116.
Ridewood, W. G. 1896 A, 383, 386.
1921 A, 353.

Stromer, E. 1905 C, 174, 180.
1925 A, 20.
Terra, P. 1911 A, 201, fig. 51.
Weidenreich, F. 1926 A, 46.
Weiler, W. 1922 A, 103, pl. i.
Winckler, T. C. 1876 A, 11.
Woodward, A. S. 1889 I, 12.
Zittel and Koken 1911 A, 51.
Zittel and Schlosser 1923 A, 56.

Galeocerdo aduncus Agassiz.

Hay, O. P. 1902 A, 311.
Ameghino, F. 1906 A, 185, 259.
1908 B, 485, figs. *o, u.*
Bassani, F. 1891 A, 36, pl. i, fig. 4; pl. ii, fig. 20.
Eastman, C. R. 1904 H, 88; pl. xxxii, fig. 11.
Fowler, H. W. 1911 A, 67, figs. 30, 31.
Gervais, P. 1852 A, explan. pl. lxxiv, fig. 8.
1859 A, 520, pl. lxxiv, fig. 8.
Jordan, D. S. 1910 B, 182.
Leriche, M. 1906 A, 308.
Priem, F. 1912 A, 215, 219, 228, 239.
Shattuck, G. B. 1904 A, xcvi.
Upper Cretaceous (Manasquan, etc.); New Jersey: Miocene (Calvert); Maryland: (Kirkwood); New Jersey.

Galeocerdo contortus Gibbes.

Hay, O. P. 1902 A, 311.
Ameghino, F. 1906 A, 182, pl. ii, figs. 26, 27.
Eastman, C. R. 1904 H, 87, pl. xxxii, fig. 9.
Fowler, H. W. 1911 A, 69, fig. 32.
Shattuck, G. B. 1904 A, xcvi.
Stromer, E. 1905 C, 176.
Upper Cretaceous (Manasquan); New Jersey: Miocene (Calvert and Choptank); Maryland.

Galeocerdo crassidens Cope.

Hay, O. P. 1902 A, 311.
Upper Cretaceous (Niobrara); Kansas.

Galeocerdo lævissimus Cope.

Hay, O. P. 1902 A, 311.
Eastman, C. R. 1904 H, 84, pl. xxxii, fig. 2 (Carcharias).
Shattuck, G. B. 1904 A, xcvi (Carcharias).
Miocene (Calvert); Maryland.

Galeocerdo latidens Agassiz.

Hay, O. P. 1902 A, 311.
Ameghino, F. 1906 A, 182, pl. ii, figs. 24, 25.
1908 B, 485, figs. *a, e, i.*
Coulon, L. 1903 A, 130.
Clark and Miller 1912 A, 117, 118.
Eastman, C. R. 1901 B, 109, pl. xiv, fig. 8.
1904 H, 88, pl. xxxii, fig. 10.
Fowler, H. W. 1911 A, 70, fig. 33.
Gervais, P. 1859 A, 520, pl. lxxiv, fig. 7.
Hopkins, F. V. 1870 A, 93.
1871 A, 13.
Leriche, M. 1905 A, 77, 136, 190, pl. viii, figs. 19-28.
Leriche, M. 1906 B, 353, 355.
1906 C, 417 pl. xi, figs. 19-28.
Priem, F. 1906 A, 202, fig. 6.
1908 B, pl. iv, fig. 10.
Sellards, E. H. 1913 A, pl. vii, fig. 16 ("shark").
1915 D, 81, 98, fig. 28 ("Galeocerdo"), (This species?).
Shattuck, G. B. 1904 A, xcvi.
Stromer, E. 1903 A, 33, pl. i, fig. 7.
1905 C, 175, pl. xvi, figs. 10-15.
Woodward, A. S. 1889 I, 12, figs. 31, 32.
Eocene; Louisiana: Eocene (Nanjemoy); Maryland: Miocene; New Jersey: (Calvert and Choptank); Maryland.

Galeocerdo minor Agassiz.

Hay, O. P. 1902 A, 311.
Ameghino, F. 1906 A, 259.
Bassani, F. 1891 A, 37.
Hopkins, F. V. 1871 A, 13.
Leriche, M. 1905 A, 77, 134, 190, 201, pl. viii, figs. 33-43 (Galeus).
1906 C, 418 (Galeus).
Priem, F. 1907 A, 317, figs. 1, 2 (Galeus).
Stromer, E. 1905 C, 175.
Tertiary; Europe: Eocene; Alabama, Louisiana.

Galeocerdo productus Agassiz.

Hay, O. P. 1902 A, 312.
Anderson, F. M. 1911 A, 101.
Blake, W. P. 1857 A, 171, 172, figs. 4, 5.
1866 A, 290.
Jordan, D. S. 1907 A, 101, 114, fig. 13; 110, figs. 4a-4c (This species?).
Jordan and Beal 1913 A, 245, 247.
Jordan and Gilbert 1919 A, 21.
Jordan and Hannibal 1923 A, 40 (Syn. of Gyrace occidentalis).
Leriche, M. 1908 C, 305 (G. productus Agassiz and G. productus Jordan 1907 A, 101, fig. 13 as syns. of G. aduncus).
Miocene (Monterey); California.

Galeocerdo subcrenatus Emmons.

Hay, O. P. 1902 A, 312.
North Carolina; formation unknown.

Galeocerdo triqueter Eastman.

Eastman, C. R. 1904 H, 89, pl. xxxii, fig. 12.
Shattuck, G. B. 1904 A, xcvi.
Miocene (Calvert); Maryland.

Galeocerdo sp. indet.

Hay, O. P. 1902 A, 312.
Cannon, G. L. 1890 B, 313, Upper Cretaceous (Niobrara); Colorado.
Gidley, J. W. 1927 E, 274. Pleistocene; Florida.
Hay, O. P. 1927 D, 274. Pleistocene; Florida.
Merrill, G. P. 1907 A, 11. Eocene; New Mexico.
Tuomey, M. 1848 A, 166, 180. Eocene; South Carolina.

GYRACE Jordan and Hannibal. Type *Scymnus occidentalis* Agassiz.

Jordan and Hannibal in Jordan, D. S. 1923 A, 100.
Jordan and Hannibal 1923 A, 38.

Gyrace occidentalis (Agassiz).

Hay, O. P. 1902 A, 314 (Scymnorhinus).
Anderson, F. M. 1911 A, 101 (Dalatias).
Blake, W. P. 1857 A, 172 (Scymnus).
Braus, H. 1899 A, 518 (Scymnus).
Jordan, D. S. 1907 A, 118 (Dalatias).
1919, in Jordan and Gilbert 1919 A, 17, 20, pl. vii, fig. G (Triakis beali).
Jordan, D. S. 1923 A, 100 (To Gyrace).
Jordan and Beal 1913 A, 245-253 (Dalatias).
Jordan and Gilbert 1919 A, 23, 62 (Scymnorhinus); 17, 20, pl. vii, fig. g (Triakis beali).
Jordan and Hannibal 1923 A, 40, 62, pl. ii, figs. *b-f, l, m, q, cc.*
Klaatsch, H. 1890 A, 107, pl. vi (Scymnus).
Leunis and Ludwig 1883 A, 787 (Scymnus).
Mayer, P. 1886 A, 250 (Scymnus).
Owen, R. 1866 A, 78 (Scymnus).
Sečerov, S. 1911 A, 8 (Scymnus).
Miocene (Monterey); California.

CARCHARHININÆ Jordan and Evermann.

Hay, O. P. 1902 A, 312.
Garman, S. 1913 A, 12 (Carcharinidæ).
Goodrich, E. S. 1909 A, 151 (Carcharinæ).
Mayer, P. 1886 A, 273, 275 (Carchariidæ).
Radcliffe, L. 1916 A, 250 (Carcharhinidæ).

CARCHARHINUS Blainville. Type *C. commersonianus* Blainville.

Hay, O. P. 1902 A, 312.
Ameghino, F. 1906 A, 182 (Carcharias).
Arldt, T. 1923 A, 486 (Carcharias).
Bridge, T. W. 1904 A, 448, 734 (Carcharias).
Bronn, H. G. 1849 A, 642 (Glyphis); 645 (Carcharias).
Chapman, F. 1918 A, 8 (Carcharias).
Davidoff, M. 1879 A (Carcharias).
Duméril, A. 1856 A, 124 ("requin").
Fahrenholz, C. 1915 A, 401 (Carcharias).
Fowler, H. W. 1911 A, 74 (Glyphis).
Garman, S. 1913 A, 4, 123 (Carcharinus).
Gegenbaur, C. 1870 B, 451, pl. xv, figs. 9, 10 (Carcharias).
1870 C, 405 (Carcharias).
Hay, O. P. 1901 B, 67.
Huber, O. 1901 A, 624, pl. xxvii (Carcharias).
Jordan, D. S. 1905 A, i, 542; ii, 561 (Carcharias).
1917 A, 95.
1923 A, 100.
1928 A, 1.
Jordan and Beal 1913 A, 248.
Jordan and Evermann 1917 A, 95.
Jordan and Gilbert 1882 A, 22.
Jordan and Hannibal 1923 A, 36.
Leriche, M. 1906 C, 413 (Carcharias).
Leunis and Ludwig 1883 A, 783 (Carcharias).
Mayer, P. 1886 A, 246 (Carcharias).
Müller and Henle 1838 A, 34 (Carcharias).
Priem, F. 1904 A, 290 (Carcharias, Aprionodon).
1908 B, 96 (Carcharias).
Rabinerson, A. 1925 A, 440, fig. 2; 493 (Carcharias).
Radcliffe, L. 1916 A, 250, 255, pls. xxxix-xli; text-figs. 12-14.
Ridewood, W. G. 1921 A, 342, 355 (Carcharias).
Rosenberg, E. 1887 A, 32 (Carcharias).
Stromer, E. 1905 C, 176, 181 (Carcharias).
Struck, W. 1915 A, 138, fig. 5 (Carcharias).
Tomes, C. S. 1898 B, 444, 449, pl. xviii (Carcharias).
1898 C, 344 (Carcharias).
White, J. W. 1905 A, 320 (Carcharias).
Williamson, W. C. 1851 A, 677, pl. xxxi, figs. 33-36.
Zittel and Koken 1911 A, 51.

Carcharhinus (Prionace) antiquus (Agassiz).

Hay, O. P. 1902 A, 312.
Anderson, F. M. 1911 A, 101 (Carcharias).
Blake, W. P. 1857 A, 172 (Prionodon).
1866 A, 290 (Prionodon).
Eastman, C. R. 1904 H, 85 (Prionodon).
Jordan, D. S. 1907 A, 103, fig. 5 (Carcharias); 105, fig. 4 (Galeus zygopterus?).
Jordan and Beal 1913 A, 245, 248 (C. antiquus); 245, 247, fig. *a* (Galeorhinus hannibali).
Jordan and Gilbert 1919 A, 21 (C. antiquus); 21, 62 (Galeorhinus hannibali).
Jordan and Hannibal 1923 A, 36, 62, pl. ii, figs. *c, k, j, p.*
Miocene; California.

Carcharhinus collatus (Cope).

Cope, E. D. in Eastman, C. R. 1904 H, 85 (Sphyrna).
Eastman, C. R. 1904 H, 85, pl. xxxii, figs. 3-5 (Carcharias).
Leriche, M. 1906 A, 305 (Carcharias. This species?).
Miocene (Calvert and Choptank); Maryland: Neocene; France.

Carcharhinus (Prionace) egertoni (Agassiz).

Hay, O. P. 1902 A, 312.
Ameghino, F. 1906 A, 182, 185, 259 (Carcharias).
Eastman, C. R. 1904 H, 84, pl. xxxii, fig. 1 (Carcharias).
Dall and Harris 1892 A, 73 (Galeocerdo).
Fowler, H. W. 1911 A, 75, fig. 36 (Glyphis).
Leriche, M. 1906 A, 306 (Carcharias).
Shattuck, G. B. 1904 A, xcvi [Carcharias (Prionodon)].

Stromer, E. 1905 C, 177, pl. xvi, figs. 17-19 (Prionodon).
Upper Cretaceous (Manasquan, etc.); New Jersey: Miocene (Calvert); Maryland: (Kirkwood); New Jersey.

Carcharhinus (Aprionodon) gibbesii (Woodward).

Hay, O. P. 1902 A, 313.
Ameghino, F. 1906 A, 185, 259 (Carcharias gibbesi).
Fowler, H. W. 1911 A, 75 (Aprionodon).
Priem, F. 1911 B, 336 (Carcharias).
Eocene; South Carolina, Alabama.

Carcharhinus incidens Eastman.

Eastman, C. R. 1904 H, 87, pl. xxxii, fig. 8 (Carcharias).
Shattuck, G. B. 1904 A, xcvi (Carcharias).
Middle Miocene (Calvert); Maryland.

Carcharhinus magdalenæ Jordan and Hannibal.

Jordan and Hannibal 1923 A, 38, 63, pl. ii, figs. *n, r, s;* pl. iii, figs. *aa, bb;* pl. vi, fig. *d.*
Hay, O. P. 1927 D, 174.
Miocene (Monterey): Pleistocene? (Lomita); California.

Carcharhinus (Prionace) tenuis (Agassiz).

Hay, O. P. 1902 A, 313.
Senonian; Switzerland: Eocene?; South Carolina.

Carcharhinus sp. indet.

Hay, O. P. 1902 A, 313. Eocene; Alabama.
Tuomey, M. 1848 A, 166 ("Glyphis"). Tertiary; South Carolina.

MICRODUS Emmons. Type *M. lævis* Emmons.

Hay, O. P. 1902 A, 313.
Jordan, D. S. 1923 A, 100.
The type is an object of uncertain relationships.

Microdus lævis Emmons.

Hay, O. P. 1902 A, 313.
Triassic; North Carolina.

HEMIPRISTIS Agassiz. Type *H. serra* Agassiz.

Hay, O. P. 1902 A, 313.
Arldt, T. 1923 A, 486.
Bassani, F. 1891 A, 38.
Bronn, H. G. 1848 A, 585.
1849 A, 645.
Coulon, L. 1903 A, 129.
Fowler, H. W. 1911 A, 71.
Giebel, C. G. 1855 A, 117.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1923 A, 100.
Jordan and Beal 1913 A, 248.
Jordan and Hannibal 1923 A, 40.
Klaatsch, H. 1890 A, 121.
Stefano, G. 1912 A, 409.
Stromer, E. 1905 C, 174, 180.
Zittel and Koken 1911 A, 51.
Zittel and Schlosser 1923 A, 56, fig. 80.

Hemipristis chiconis Jordan.

Jordan, D. S. 1907 A, 105, fig. 7.
Jordan and Beal 1913 A, 245, 248.
Jordan and Hannibal 1923 A, 36, 61 (Notidanion?).
Cretaceous (Chico); California.

Hemipristis heteropleurus Agassiz.

Hay, O. P. 1902 A, 313.
Anderson, F. M. 1911 A, 101.
Blake, W. P. 1857 A, 171, 172, fig. 3.
1866 A, 290.
Jordan, D. S. 1907 A, 104, fig. 6.
1910 B, 182.
1919 B, 214.
Jordan and Beal 1913 A, 245, 248.
Jordan and Gilbert 1919 A, 21.
Jordan and Hannibal 1923 A, 40, 44, 62, pl. ii, figs. *u, v, aa, bb.*
Leriche, M. 1908 C, 305 (Syn. of H. serra).
Miocene (Monterey); California.

Hemipristis serra Agassiz.

Hay, O. P. 1902 A, 313.
Ameghino, F. 1906 A, 185, 259.
Bassani, F. 1891 A, 38, pl. i, fig. 15.
Blake, C. C. 1862 C, 316.
Clark and Miller 1912 A, 167, 168.
Coulon, L. 1903 A, 129 (H. serra, H. paucidens).
Dall, W. H. 1894 A, 297.
Dall and Harris 1892 A, 73 (Nemipristis, misprint).
Eastman, C. R. 1904 H, 90, pl. xxxii, figs. 13, 14.
Fowler, H. W. 1911 A, 71, figs. 34, 35.
Gervais, P. 1852 A, explan., pl. lxxiv.
1859 A, 519, pl. lxxiv.
Gorjanović-Kramberger, D. 1891 A, 97.
Hay, O. P. 1922 B, 3.
Jordan, D. S. 1910 B, 182.
Jordan and Beal 1913 A, 248.
Jordan and Hannibal 1923 A, 40, 44 (Syn.? of H. heteropleurus).
Leriche, M. 1906 A, 309.
Mantell, G. A. 1844 A, 624, fig. 130.
Priem, F. 1912 A, 215, 219, 228, 239.
Sellards, E. H. 1913 A, pl. vii, fig. 12 ("shark").
1915 D, 99, fig. 26 ("Hemipristis").
Shattuck, G. B. 1904 A, xcvi.
Stefano, G. 1912 A, 410, pls. xii, xiv.
Stromer, E. 1905 C, 178.
Tuomey, M. 1848 A, 166, 180 ("Hemipristis").
Upper Cretaceous (Manasquan, etc.); New Jersey: Miocene (Kirkwood); New Jersey: (Calvert); Maryland, Virginia, South Carolina: Miocene; Europe.

Hemipristis sp. indet.

Hay, O. P. 1902 A, 313. Eocene; South Carolina.
Sellards, E. H. 1915 D, 98, fig. 26. Pliocene (Bone Valley); Florida.

SPHYRNIDÆ Gill.

Gill, T. 1872 B, 24.
Hay, O. P. 1902 A, 314 (Sphyrninæ).
Bridge, T. W. 1904 A, 449.
Fowler, H. W. 1911 A, 77.
Garman, S. 1913 A, 155 (Cestraciontidæ).
Goodrich, E. S. 1909 A, 151 (Sphyrninæ).
Huber, O. 1901 A, 626 (Zygænidæ).
Jordan, D. S. 1905 A, i, 543.
1907 B, 200, 758.
1923 A, 101.
Jordan and Gilbert 1882 A, 25.
Kingsley, J. S. 1885 A, 80.
Radcliffe, L. 1916 A, 263 (Cestraciontidæ).
Regan, C. T. 1906 A, 746 (Sphyrninæ).
Roth, W. 1911 A, 536 (Zygænidæ).

SPHYRNA Rafinesque. Type *Squalus zygæna* Linn.

Rafinesque, C. S. 1910, Indice Ittiol. Sicil., 46, 60.
Hay, O. P. 1902 A, 314.
Abel, O. 1912 F, 518.
Allis, E. P. 1915 A, 587.
Arldt, T. 1923 A, 486.
Bassani, F. 1891 A, 40.
Braus, H. 1906 A, 182.
Bridge, T. W. 1904 A, 449, 756.
Bronn, H. G. 1848 B, 1171.
1849 A, 645.
Cunningham, J. T. 1912 A, 284.
Daniel, J. F. 1922 A, figs. 62, 96 (Zygæna).
Duméril, A. 1856 A, 123 ("marteau").
Eastman, C. R. 1901 B, 109.
Fahrenholz, C. 1915 A, 402 (Zygæna).
Fowler, H. W. 1911 A, 77.
Fürbringer, K. 1903 A, 385.
Garman, S. 1913 A, 155 (Cestracion).
Giebel, C. G. 1855 A, 116.
Gudger, E. W. 1907 A, 1005.
Hay, O. P. 1901 B, 67.
Huber, O. 1901 A, 626 (Zygæna).
Imms, A. D. 1905 A, 43.
Jordan, D. S. 1923 A, 101.
Jordan and Evermann 1917 A, 82.
Jordan and Gilbert 1882 A, 26, 874.
Kingsley, J. S. 1925 A, 226, fig. 238 (Zygæna).
Köstlin, O. 1844 A (Zygæna).
Leriche, M. 1910 D, 298, fig. 96.
Leunis and Ludwig 1883 A, 783 (Zygæna).
Lloyd and Sheppard 1922 A, 971, figs. 1-7 (Zygæna).
Mayer, P. 1886 A, 235 (Zygæna).
Müller and Henle 1838 A, 35 (Zygæna).
Owen, R. 1845 B, 30 (Zygæna).
Rabinerson, A. 1925 A, 435, fig. 1; 491, fig. 3 (Zygæna).
Rabl, C. 1901 A, 477.
Radcliffe, L. 1916 A, 263, pls. xliii, xliv, text-figs. 17, 18 (Cestracion).
Ridewood, W. G. 1899 A, 49 (Zygæna).
1921 A, 355, fig. 8.
Roth, W. 1911 A, 536, pls. vi, vii (Zygæna).
Sauvage, E. 1867 A, 124 (Sphyrna).
Sečerov, S. 1911 A, 8, 11, pl. i (Zygæna).
Smith, H. M. 1916 A, 347.
Stannius, H. 1854 A.
Valenciennes, A. 1822 A, 222 (Zygæna).
Wagner, R. 1843 A (Zygæna).

Sphyrna gibbesii Hay.

Hay, O. P. 1902 A, 314.
Fowler, H. W. 1911 A, 78, fig. 37.
Upper Cretaceous; New Jersey.

Sphyrna lata Agassiz.

Hay, O. P. 1902 A, 314.
Tertiary; Virginia: Eocene; South Carolina.
Identification doubtful.

Sphyrna magna Cope.

Hay, O. P. 1902 A, 314.
Eastman, C. R. 1904 H, 86, pl. xxxii, figs. 6, 7 (Carcharias).
Shattuck, G. B. 1904 A, xcvi (Carcharias).
Miocene (Calvert); Maryland.

Sphyrna prisca Agassiz.

Hay, O. P. 1902 A, 314.
Ameghino, F. 1906 A, 185, 259 (Sphirna).
Bassani, F. 1891 A, 41, pl. ii, fig. 19.
Clark and Miller 1912 A, 117, 118.
Eastman, C. R. 1901 B, 110, pl. xiv, figs. 7a, 7b.
1904 H, 91, pl. xxxii, fig. 15.
Fowler, H. W. 1911 A, 75, 78, fig. 38.
Gorjanovič-Kramberger, D. 1891 A, 97, pl. viii, fig. 17 (This species?).
Jordan, D. S. 1907 B, 200.
Leriche, M. 1906 A, 307.
1907 A, 354, pl. iii, figs. 5-8.
Priem, F. 1904 A, 289, figs. 6, 7.
1912 A, 216, 217, 228, 240, fig. 1.
1914 A, 123, text-fig. 12.
Sauvage, E. 1867 A, 125 (Sphyrha).
Shattuck, G. B. 1904 A, xcvi.
Miocene; Europe: Eocene; South Carolina: Eocene (Aquia); Maryland: Miocene (Calvert); Maryland.

Superfamily SQUALOIDÆ, new form.

Arldt, T. 1923 A, 486 ("squaloiden").
Garman, S. 1913 A, 13 (Squaloidei).
Goodrich, E. S. 1909 A, 151 (Squaliformes).
Hay, O. P. 1902 A, 314 (Squaloidea).
Jaekel, O. 1911 A, 62 (Spinacidi).
Jordan, D. S. 1905 A, i, 543; ii, 595 (Tectospondyli).
Jordan, D. S. 1907 B, 200, 758 (Tectospondyli); 202 (Cyclospondyli).
1923 A, 101 (Squaloidei).
Jordan and Gilbert 1882 A, 12 (Scymnoidea).
Rauther, M. 1913 A, 1098 (Squaloidei).
Regan, C. T. 1906 A, 723 (Squaloidei).
Stromer, E. 1905 C, 164 (Squaloidei).
Van Wijhe, J. W. 1922 A, 291 (Squaloidei).

SQUALIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 99.
Hay, O. P. 1902 A, 314 (Somniosidæ, in part).
Abel, O. 1919 A, 123 (Spinacidæ).
Allis, E. P. 1914 A, 359 (Spinacidæ).
1923 B (Spinacidæ, Acanthias).
Arldt, T. 1923 A, 487 ("squaliden").
Bridge, T. W. 1904 A, 454 (Spinacidæ).
Brohmer, P. 1908 A, 25 (Spinax).
Gill, T. 1905 A, 658.
Goodrich, E. S. 1909 A, 151 (Spinacidæ).
Günther, A. C. 1870 A, 417 (Spinacidæ).
1880 A, 330 (Spinacidæ).
Jaekel, O. 1911 A, 62 (Spinacidæ).
Jordan, D. S. 1905, i, 545; ii, 598.
1907 B, 202.
1923 A, 101.
Laaser, P. 1900 A, 480, figs. 1-8 (Spinax, Acanthias).
Rabinerson, A. 1925 A, 444, 517 ("spinaciden").
Radcliffe, L. 1916 A, 267.
Rauther, M. 1913 A, 1098 (Spinacidæ).
Regan, C. T. 1906 A, 723.
1908 B, 39.
Ridewood, W. G. 1921 A, 371 (Squalinæ).
Schlosser, M. 1917 A, 139 ("spinaciden").
Sewertzoff, A. N. 1923 B (Spinaceidæ).
Stannius, H. 1854 A.
Woodward, A. S. 1889 D, 30 (Spinacidæ).
1898 B, 50 (Spinacidæ).
Zittel, K. A. 1890 A, 87 (Spinacidæ).
Zittel and Koken 1911 A, 49 (Spinacidæ).
Zittel and Schlosser 1923 A, 55 (Spinacidæ).

SQUALUS Linnæus. Type *S. acanthias* Linn.

Linnæus, C. 1758 A, 233.
Allis, E. P. 1920 A, 222, pls. xxiii-xxv (Acanthias).
1922 C, 2.
1926 A, 164 (Acanthias).
Arldt, T. 1923 A, 487.
Beer, G. R. 1922 A, 457, figs. 1-13.
1924 B, 53.
1926 A, 275, 285, figs. 8-10, 125-128.
Bridge, T. 1904 A, 455, 729 (Acanthias).
Daniel, J. F. 1922 A, many figs. (Squalus, Acanthias).
Edgeworth, F. H. 1925 A, 237, figs. 21-23 (Acanthias).
Evans, H. M. 1923 A, 8, 27, pl. i, fig. 4; pl. ii, figs. 5, 6; text-figs. 5-7 (Acanthias).
Gaupp, E. 1905 D, 875 (Acanthias).
Gill, T. 1862, Proc. Acad. Nat. Sci. Phila., 496 (Entoxychirus).
Goodrich, E. S. 1918 A, 13 (Acanthias).
Günther, A. C. 1880 A, 331 (Acanthias).
Haller, G. 1923 A, 96, figs. 4-6, 9-11, 15-17, 19 (Acanthias).
1924 A, 313, fig.
1926 A, 452, fig. 2 (Acanthias).
Hommes, J. H. 1924 A, 23, 29, fig. 19 (Acanthias).
Jordan, D. S. 1905 A, i, 545.
1907 B, 202.
1917 A, 11.
Jordan and Evermann 1896 A, 53.
Jordan and Gilbert 1882 A, 17.
Jordan and Hannibal 1923 A, 58.
Kingsbury, B. F. 1926 A, 89, 98, 104.
Kingsbury and Adelmann 1924 A, 344, figs. 3, 4.
Leigh-Sharpe, W. H. 1926 A, 340 (Acanthias).
Lubosch, W. 1909 A, 2, figs. 1, 2, 7 (Acanthias).
Mori, O. 1924 A, 389 (Acanthias).
Nauck, E. T. 1926 B, 30, figs. 1-5, 17, 18 (Acanthias).
Norman, E. W. 1926 A, 412 (Acanthias).
Owen, R. 1848 B, 87 (Acanthias).
1866 A, 32, 35, 486 (Acanthias).
Pehrson, T. 1922 A, 9 (Acanthias).
Rabinerson, A. 1925 A, 437, fig. 2; 514, fig. 1.
Rafinesque, C. 1810, Caratteri, etc., 13.
Risso, A. 1826, Europe Merid, 1311 (Acanthias).
Sagemehl, M. 1883 A, 220 (Acanthias).
Sewertzoff and Disler 1924 A, 347 (Acanthias).
Stadtmüller, F. 1926 A, 160, fig. 6 (Acanthias).
Stannius, H. 1854 A (Spinax).
Van Wijhe, J. W. 1922 A, 271-278, pl. xi, text-figs. 1-4.
Woodward, A. S. 1889 D, 31 (Acanthias).
Ziegler, H. E. 1923 A, 68, figs. 6, 7 (Acanthias).
Zittel, K. A. 1890 A, 87 (Acanthias).
Zittel and Koken 1911 A, 50, fig. 71.
Zittel and Schlosser 1923 A, 55, fig. 76 (Acanthias).

Squalus serriculus Jordan and Hannibal.

Jordan and Hannibal 1923 A, 58, 62, pl. iii, figs. *m, p.*
Miocene (Monterey); California.

SCYMNORHINIDÆ Jordan and J. Z. Gilbert.

Jordan and J. Z. Gilbert 1919 A, 23 (earliest?).
Hay, O. P. 1902 A, 314 (Somniosidæ).
Abel, O. 1919 A, 123 (Spinacidæ).
Allis, E. P. 1914 A, 359 (Spinacidæ).
Bonaparte, C. L. 1831 A, 99 (Included all existing sharks).
1840 A, 45 (Scymni).
Bridge, T. W. 1904 A, 454 (Spinacidæ).
Duméril, A. 1856 A, 135 (Scymni).
Garman, S. 1913 A, 242 (Echinorhinidæ).
Gill, T. 1905 A, 658 (Squalidæ).
Goodrich, E. S. 1909 A, 151 (Spinacidæ).
Huber, O. 1901 A, 604 (Scymnidæ).
Jaekel, O. 1911 A, 62 (Spinacidæ).
Jordan, D. S. 1905 A, i, 546 (Dalatiidæ); 547 (Echinorhinidæ).
1907 B, 203, 758 (Dalatiidæ); 204, 758 (Echinorhinidæ).
1923 A, 102.
Jordan and C. H. Gilbert 1882 A, 13 (Scymnidæ); 15 (Spinacidæ).
Jordan and J. Z. Gilbert 1919 A, 23 (Scymnorhinidæ, Echinorhinidæ).
Laaser, P. 1900 A, 480, figs. 1-8 (Spinax, Acanthias).
Radcliffe, L. 1916 A, 267 (Squalidæ).

Roth, W. 1911 A, 524 (Scymnidæ); 530 (Echinorhinidæ).
Stannius, H. 1854 A (Spinaces, Scymnoidei).
Zittel and Schlosser 1923 A, 56, figs. 3, 78 (Scyllidæ).

Scymnorhinus Bonaparte. Type *Scymnus lichia* Cuvier.

At present no American species is included in this genus, *S. occidentalis* being referred to *Gyrace*.

Hay, O. P. 1902 A, 314.
Allis, E. P. 1909 A, 202 (Scymnus).
1914 A, 359 (Scymnus).
1922 B, 197 (Scymnus).
1923 B, 125 (Scymnus).
Arldt, T. 1923 A, 488 (Scymnus).
Beer, G. R. 1926 A, 268, fig. 1 (Scymnus).
Braus, H. 1901 B, 191 (Scymnus).
Bronn, H. G. 1849 A, 641 (Scymnus).
Daniel, J. F. 1922 A, fig. 107 (Scymnus).
Derjugin, K. M. 1909 A, (Scymnus).
Fürbringer, K. 1903 A, 366 (Scymnus).
1904 B, 464, fig. 10 (Scymnus).
Garman, S. 1913 A, 236.
Gaupp, E. 1905 D, 875 (Scymnus).
Goodrich, E. S. 1909 A, 80, 128, fig. 53.
Haswell, W. A. 1884 A, 77 (Scymnus).
Hay, O. P. 1901 A, 67.
Hoffmann, L. 1912 A, 278 (Scymnus).
Huber, O. 1901 A, 604, pl. xxvii (Scymnus).
Ihering, H. 1878 A, 74 (Scymnus).
Jordan, D. S. 1905 A, i, 546 (Dalatias).
1907 B, 203 (Dalatias).
1919 B, 225.
1923 A, 102.
Jordan and Gilbert 1919 A.
1919 B.
Klaatsch, H. 1890 A, 107, pl. vi (Scymnus).
Lakjer, T. 1927 A, 221, fig. 79 (Scymnus).
Leigh-Sharpe, W. H. 1926 A, 314, 349 (Scymnus).
Leriche, M. 1906 C, 421 (Scymnus).
Leydig, F. 1852 A (Scymnus).
Luther, A. 1909 A, 21.
Müller and Henle 1838 A, 89.
Owen, R. 1839 G, 213 (Scymnus).
1845 B, 25, 31, 34, pl. iv, fig. 3 (Scymnus).
1866 A, 35, 78, 373, fig. 63 (Scymnus).
Rabinerson, A. 1925 A, 437, fig. 2; 514, fig. 1 (Scymnus).
Rauther, M. 1913 A, 1063, fig. 6 (Scymnus).
Regan, C. T. 1908 B, 40, 54.
Ridewood, W. G. 1895 B, 429.
1899 A, 47 (Scymnus).
1921 A, 373.
Roth, W. 1911 A, 524, pl. vi, fig. 5 (Scymnus).
Sewertzoff, A. N. 1923 B, fig. 1 (Scymnus).
Stannius, H. 1854 A (Scymnus).
Stromer, E. 1925 A, 20 (Scymnus).
Van Wijhe, J. W. 1922 A, 291 (Scymnus).
Versluys, J. 1922 B, 98 (Scymnus).
Zittel and Schlosser 1923 A, 55, figs. 5, 77 (Scymnus).

Echinorhinus Blainville. Type *Squalus spinosus* Gmelin.

Hay, O. P. 1902 A, 315.
Arldt, T. 1923 A, 488.
Blake, W. P. 1857 A, 172.
Fürbringer, K. 1903 A, 367.
Garman, S. 1913 A, 243.
Gaupp, E. 1905 D, 891, 894.
Hay, O. P. 1901 B, 67
Jordan, D. S. 1923 A, 102.
Jordan and Gilbert 1882 A, 14.
Jordan and Hannibal 1923 A, 58.
Müller and Henle 1838 A, 89 (Echinarrhinus).
Regan, C. T. 1908 B, 39, 41.
Ridewood, W. G. 1899 B, 346, fig.
1921 A, 326, 373, fig. 23.
Stannius, H. 1854 A.
Van Wijhe, J. W. 1922 A, 291.

Echinorhinus blakei Agassiz.

Hay, O. P. 1902 A, 315.
Blake, W. P. 1857 A, 172.
Jordan, D. S. 1907 A, 119.
Jordan and Beal 1913 A, 253.
Jordan and Gilbert 1919 A, 23.
Jordan and Hannibal 1923 A, 57, pl. iv, figs. *c*, *d*.
Miocene (Monterey); California.

Suborder Rajiformes Goodrich.

Goodrich, E. S. 1909 A, viii, 153.
Hay, O. P. 1902 A, 315 (Rajæ).
Agassiz, L. 1844 D, 142 ("rayes").
1844 E, 332 ("rays").
1854 A, 4 ("rays").
Allis, E. P. 1905 A, 475 (Batoidei).
1913 A, 327 (Batoidei).
1915 A, (Batoidei).
1918 B, 263 (Batoidei).
1923 B, 140 (Batoidei).
1925 A, 76 (Batoidei).
Anonymous, 1898 A, 373 (Batoidea).
Arldt, T. 1907 D, 146 (Batoidei).
1923 A, 488.
Backman, G. 1913 A (Batoidei).
1915 A (Rajæ).
Beer, G. R. 1924 B, 60 (Batoidea).
Bessels, E. 1869 A, 153 ("rochen").
Beyer, H. 1907 A, 266 ("rochen").
Boas, J. E. V. 1914 B, 538 ("rochen").
Bonaparte, C. L. 1833 A, 1203 (Raidæ).
1838 C, 197, 201 (Rajidæ).
Braus, H. 1899 A ("rochen").
Bridge, T. W. 1904 A, 457 (Batoidei).
1878 A, 706 (Batoidei).
Brohl, E. 1909 A, 347 ("rochen").
Bruch, C. 1862 A, 79 ("rochen").
Cunningham, J. T. 1912 A, 246 (Batoidei).
Cuvier, G. 1805 A ("raies").
Dana, J. D. 1863 B, 317 ("rays").
Dean, B. 1900 A, 22 (Batoidei).
Dohrn, A. 1884 A ("rochen").

Dollo, L. 1889 E, 152 ("raies").
1904 C, 47 ("batoïdes").
Duméril, A. 1856 A, 137 ("raies").
Eichwald, E. 1832 A, 878 ("rochen").
Eimer, G. H. F. 1901 A, 41 (Raji).
Fahrenholz, C. 1915 A, 394, 404 ("rochen").
Fitzinger, L. J. 1873 A, 56 (Hypochismata).
Fowler, H. W. 1911 A, 80 (Batoidei).
Fürbringer, M. 1902 A ("rochen").
1903 A, 623 ("rochen").
Garman, S. 1904 A, 246, 269 (Platosomia).
1913 A, 10, 257.
Gaupp, E. 1905 D, 868 ("rochen").
Gegenbaur, C. 1870 C, 410 ("rochen").
Geoffroy, St. Hilaire, E. F. 1807 C, 91 ("raies").
Giebel, C. G. 1855 A, 117 (Rajacei).
Gill, T. 1905 A, 657 (Batoidei).
Goodrich, E. S. 1909 A, 153 (Rajiformes).
Greene, J. R. 1861 A, 227 (Raiidæ).
Gregory, W. K. 1907 D, 446 (Rajæ).
Haeckel, E. 1868 A, 443 (Rajæ).
1873 A, 516 (Rajacei).
Haller, G. 1923 A, 101, figs. 2, 13 ("rochen").
1926 A, 453 ("rochen").
Hilzheimer, M. 1913 A, 470 (Batoidei).
Hoeven, J. 1822 A (Rajæ).
Humphreys, J. 1908 A, 11 ("rays").
Imms, A. D. 1905 A, 45 (Batoidei).
Jaekel, O. 1911 A, 64 (Rhinoraji).
1913 C, 36 ("rochen").
Jordan, D. S. 1905 A, i, 519, 549 (Batoidei).
1907 B, 206, 759 (Batoidei).
1923 A, 102 (Batoidei).
Jordan and Gilbert 1882 A, 36 (Raiae).
Kehrer, F. A. 1896 A, 347 ("rochen").
Killian, G. 1891 A, 103, fig. 25.
Kingsley, J. S. 1885 A, 84 (Raiae).
Köstlin, O. 1844 A, 425 ("rochen").
Krivetski, A. 1917 A, 19 ("raies").
Lavocat, A. 1885 A, 32 ("raies").
1896 B, 194 ("raies").
Leigh-Sharpe, W. H. 1926 A, 341 (Batoidei).
Leunis and Ludwig 1883 A, 788 (Batoidei).
Lönnberg, W. 1902 A (Rajidæ).
Lubosch, W. 1909 A, 4 ("rochen").
Lütken, C. 1868 C (Rajae).
M'Donnell, R. 1864 A, 163 ("rays").
Mantell, G. A. 1844 A, 629 ("rays").
Meckel, J. F. 1825 A ("rochen").
Meek, A. 1916 A, 41 (Batoidei).
Müller, J. 1845 A, 137 (Rajidæ).
Müller and Henle 1838 A, 90 (Raiæ).
Owen, R. 1845 B, 43 (Raiidæ).
1866 A, 13 (Batides).
Parker and Haswell 1897 A, 156 (Rajida).
Pompeckj, J. F. 1913 A, 1129 (Batoidei).
Probst, J. 1886 B, 301 ("rochen").
Rabl, C. 1892 A, 131 (Torpedo).
1901 A, 484 (Rajae).
Rafinesque, C. S. 1815 A, 93 (Platosomia).
Rauther, M. 1913 A, 1098 (Batoidei).
Regan, C. T. 1906 A, 723, 752 (Hypotremata).
Reichert, K. B. 1849 A, 502 ("rochen").
Ridewood, W. G. 1899 A, 52 ("rays").
1921 A, 313 (Narcobatoidei; Batoidei).
Röse, C. 1892 F, 399 ("rochen").
1897 A, 58 ("rochen").
Ryder, J. 1886 A, 72, 77 (Raiae).
Sabatier, A. 1898 A, 930 ("raies").
Schauinsland, H. 1906 A, 393 ("rajiden").
Schlosser, M. 1917 A, 142 ("rochen").
Schœnichen, W. 1900 A, 502 ("rochen").
Sewertzoff, A. 1899 A, 197, 393 ("rochen").
1926 D, 83 (Batoidei).
Solger, B. 1880 B, 476 ("rochen").
Sonies, F. 1907 A, 404 ("rochen").
Steinmann, G. 1907 A, 404 (Batoidei).
Stephan, P. 1900 A, 311 ("raies").
Stromer, E. 1905 H, 216 ("rochen").
1912 A, 20 (Batoidei).
Wagner, R. 1843 A ("rochen").
Weber, E. H. 1821 A, 1060.
Wilbrand, J. B. 1824 A, 983 ("rochen").
Williamson, W. C. 1851 A, 669 ("rays").
Woodward, A. S. 1898 B, 40 (Batoidei).
1922 C, 74 (Raii).
Zittel and Schlosser 1923 A, 72 (Masticura).

Superfamily TAMIOBATOIDÆ, new name.

TAMIOBATIDÆ Hay.

Hay, O. P. 1902 A, 315.
Abel, O. 1919 A, 133.
Arldt, T. 1923 A, 488 ("tamiobatiden").
Bridge, T. W. 1904 A, 462.
Gregory, W. K. 1907 D, 446.
Hay, O. P. 1901 B, 67.
Jordan, D. S. 1905 A, i, 532, 551.
1907 B, 208, 758.
1923 A, 95.
Zittel and Woodward 1902 A, 41.

TAMIOBATIS Eastman. Type *T. vetustus* Eastman.

Hay, O. P. 1902 A, 315.
Abel, O. 1919 A, 133.
Arldt, T. 1923 A, 488.
Eastman, C. R. 1902 B, 71.
1903 B, 170.
1907 B, 65
Hay, O. P. 1901 B, 67, 73.
Jordan, D. S. 1923 A, 95.
Stromer, E. 1905 F, 477.
Trouessart, E. L. 1898 B, 8.

Tamiobatis vetustus Eastman.

Hay, O. P. 1902 A, 315.
Arldt, T. 1923 A, 488 (T. robustus).
Bridge, T. W. 1904 A, 462.
Dames, W. 1899 F, 555.
Dean, B. 1909 C, 258.
Eastman, C. R. 1907 B, 19.
1908 A, 279.
Jordan, D. S. 1905 A, i, 551.
1907 B, 208.
Pompeckj, J. F. 1913 A, 1129.
Merrill, G. P. 1907 A, 20.
Devonian (Middle or Upper); Kentucky.

Superfamily SQUATINOIDÆ, new form.

Gill, T. 1882 A, 967 (Squatinoidea).
1885 A, lxiv (Rhinæ).
1905 A, i, 547 (Rhinæ).
Gill, T. 1907 B, 204 (Rhinæ).
Jordan, D. S. 1923 A, 102 (Squatinoidei).

SQUATINIDÆ Owen.

Owen, R. 1868 A, 909 (Earliest?).
Arldt, T. 1907 D, 283.
1923 A, 488 ("squatiniden").
Bridge, T. W. 1904 A, 456 (Rhinidæ).
Dollo, L. 1889 F, 340.
Duméril, A. 1856 A, 136 (Squatinæ).
1865 A, 462 (Rhinæ).
Fitzinger, L. J. 1873 A, 56 (Squatinæ).
Gill, T. 1872 C, 23.
1882 A, 967.
1885 A, lxiv.
Goodrich, E. S. 1909 A, 156.
Günther, A. 1870 A, 430 (Rhinidæ).
Hasse, C. 1877 A, 329 ("Fam. Squatina").
Hennig, E. 1921 B, 117.
Hoernes, R. 1886 A, 544.
Huber, O. 1901 A (Rhinidæ).
Jordan, D. S. 1905 A, i, 547; ii, 593.
1907 B, 204, 759.
1923 A, 102.
Jordan and Gilbert 1882 A, 35.
Kingsley, J. S. 1885 A, 84.
Lavocat, A. 1896 B, 196 ("squatines").
Leunis and Ludwig 1883 A, 788 (Rhinidæ).
Mayer, P. 1886 A, 278.
Müller and Henle 1837 A, 399 (Squatinæ).
Owen, R. 1866 A, 13 (Squatinæ).
Pompeckj, J. F. 1913 A, 1127, 1129.
Regan, C. T. 1906 A, 723, 746, 751.
Ridewood, W. G. 1921 A, 344, 376, 395.
Schlosser, M. 1917 A, 137, 139 ("squatiniden").
Stannius, H. 1854 A, 3, seq. (Squatinæ).
Steinmann, G. 1907 A, 402.
Terra, P. 1911 A, 200.
Van Wijhe, J. W. 1922 A, 291.
Weiler, W. 1922 A, 93.
Zittel and Koken 1911 A, 64.
Zittel and Schlosser 1923 A, 69.
Zittel and Woodward 1902 A, 39.

SQUATINA Duméril. Type *S. angelus* Duméril.

Duméril, A. M. C. 1806 A, 102, 342.
Abel, O. 1906 C, 82.
1912 F, 436, fig. 317 (Rhina).
1919 A, 27, 124, figs. 86, 87 (Rhina).
1920 A, 327 (Rhina).
Allis, E. P. 1913 A, 325.
1923 B, 134 (Rhina).
Arldt, T. 1923 A, 488.
Bassani, F. 1891 A, 44.
Bridge, T. W. 1904 A, 457 (Rhina).
Bronn, H. G. 1848 B, 1197.
1849 A, 641.
Cuvier, G. 1814 A, 77 (Squalus).
1815 A, 122 (Squalus squatina).
Daniel, J. F. 1922 A, fig. 16.
Davidoff, M. 1879 A.
Dollo, L. 1889 F, 336.
Drevermann, F. 1910 B, 191, pl.
Duméril, A. 1856 A, 124 ("ange").
1865 A, 463 (Rhina).
Eastman, C. R. 1904 H, 71.
Edgeworth, F. H. 1926 A, 189.
Fraas, O. 1854 A, 782, pls. xxvii-xxix.
Fuchs, H. 1907 C, 26.
Garman, S. 1913 A, 250 (Rhina).
Gaupp, E. 1905 D, 874.
Gegenbaur, C. 1867 B, 410.
1870 B, 451.
1870 C, 414.
Giebel, C. G. 1855 A, 114.
Goette, A. 1878 A, 12.
Gregory, W. K. 1904 A, 56, 58.
Günther, A. C. 1870 A, 430 (Rhina).
Hasse, C. 1877 A, 328.
1878 A, 169.
Haswell, W. A. 1884 A, 73.
Heilprin, A. 1887 A, 300.
Hennig, E. 1921 B, 117.
Huxley, T. H. 1863 F, 373, figs. 32, 33.
1876 E, 115.
Jaekel, O. 1899 A, 277 (Rhina).
Jordan, D. S. 1905 A, i, 548.
1907 B, 205.
1917 A, 75.
1923 A, 102.
Jordan and Beal 1913 A, 254.
Jordan and Evermann 1917 A, 75.
Jordan and Gilbert 1882 A, 35.
Jordan and Hannibal 1923 A, 58.
Kesteven, H. L. 1922 A, 315.
1926 A, 136, figs. 4-6.
Kingsley, J. S. 1912 B, 77, fig. 75.
1925 A, 30, 67, figs. 31, 72.
Kner, R. 1860 B, 816.
Köstlin, O. 1844 A.
Leigh-Sharpe, W. H. 1926 A, 341 (Rhina).
Leriche, M. 1906 C, 422.
1908 A, 230, pl. iii, figs. 1-5, text-fig. 1.
Leunis and Ludwig 1883 A, 788 (Rhina).
M'Donnell, R. 1864 A, 167 ("angel-fish").
Marck, W. 1885 A, 262, pl. xxv.
Mayer, P. 1886 A, 239, 278.
Meckel, J. F. 1825 A.
Miller, H. 1851 A, 92.
Mivart, St. G. 1871 B, 391, pl. liii, fig. 5.
1878 B, 332.
Müller and Henle 1837 A, 399.
1837 B, 399.
1838 A, 89.
Newton, E. T. 1891 A, 112, pl. ix, figs. 11-11c.
Norman, E. W. 1926 A, 449, fig. 55.
Owen, R. 1845 B, 43, 50, pl. x, fig. 2.
1848 B, 87.
1866 A, 78.
1868 A, 909.
Pompeckj, J. F. 1913 A, 1127, fig. 30.

Priem, F. 1908 B, 76, 92.
Probst, J. 1886 B, 304.
Rabinerson, A. 1925 A, 442, fig. 3 (Squatina); 516, fig. 1 (Rhina).
Rabl, C. 1901 A, 523.
Regan, C. T. 1906 A, 751, figs. 115, 121.
Reis, O. M. 1893 A, 504.
Ridewood, W. G. 1895 B, 431.
1921 A, 315, 326, 376, fig. 25.
Schauinsland, H. 1906 A, 407.
Schmalhausen, J. J. 1913 A, 10.
Sečerov, S. 1911 A, 10, pl. i.
Stannius, H. 1854 A, 81, 82, 88, 98.
Steinhard, O. 1903 A, 20.
Storms, R. 1891 A, 147.
1894 A, 75, pl. vi.
Ussow, S. 1900 A, 233.
Van Wijhe, J. W. 1922 A, 291.
Versluys, J. 1922 B, 98.
Weiler, W. 1922 A, 93, pls. i-iii.
1889 I, 2, figs. 3-5.
Woodward, A. S. 1888 L, 144, pl. vii, figs. 1-6.
Woodward, A. S. 1898 F, 289, pl. x; text-fig. 1.
1912 A (1911), 223.
Zittel and Koken 1911 A, 64.
Zittel and Schlosser 1923 A, 69, fig. 116.
Zittel and Woodward 1902 A, 39.

Squatina lerichei Jordan and Beal.

Jordan and Beal 1913 A, 253, fig. B.
Jordan and Hannibal 1923 A, 59, pl. iii, figs. *b*, *c*, *i*, *j*.
Miocene (Monterey); California.

Squatina occidentalis Eastman.

Eastman, C. R. 1904 H, 71, pl. xxviii, fig. 1.
Shattuck, G. B. 1904 A, xcvi.
Miocene (Calvert); Maryland.

Squatina sp. indet.

Hussakof, L. 1908 A, 36. Eocene; South Carolina.

Superfamily RAJOIDÆ, new form.

Hay, O. P. 1902 A, 315 (Pachyura).
Bridge, T. W. 1904 A, 457 (Batoidei).
Fowler, H. W. 1911 A, 80 (Sarcura).
Garman, S. 1913 A, 257 (Rhinobatoidea); 258, 259 (Raioidei).
Gill, T. 1873 F, 12 (Raiaodiæ).
Goodrich, E. S. 1909 A, 159 (Rhinoraji).
Jordan, D. S. 1905 A, i, 519, 549 (Batoidei).
Jordan, D. S. 1907 B, 206 (Bathoidei).
1923 A, 102 (Sarcura).
Pompeckj, J. F. 1913 A, 1129 (Rhinoraji).
Rauther, M. 1913 A, 1098 (Rhinoraji).
Regan, C. T. 1906 A, 724, 753 (Batoidei).
Zittel and Koken 1911 A, 65 (Rhinorajidæ).
Zittel and Schlosser 1923 A, 71 (Rhinorajidæ).

RAJIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 99.
Hay, O. P. 1902 A, 315.
Abel, O. 1908 E, 409 ("rochen").
Anthony, R. 1912 A ("raies").
Arldt, T. 1907 D, 283.
1923 A, 489.
Backman, G. 1913 A, 8 ("rajiden").
1915 A (Raiidæ).
Bonaparte, C. L. 1839 A, 3, 6.
Braus, H. 1904 A, 405 ("rajiden").
Bridge, T. W. 1904 A, 461 (Raiidæ).
Bronn, H. G. 1849 A, 830, seq.
Carus, V. 1875 A, 604.
Cope, E. D. 1891 N, 17.
Cunningham, J. T. 1912 A, 246 (Raiidæ).
Cuvier, G. 1801 A, 26 ("raies").
1815 A, 123 ("raies").
Day, E. C. H. 1865 A, 565 (Raiidæ).
Dollo, L. 1889 F, 340.
1904 C, 50.
1910 A, 396 ("raies").
1922 A, 218 ("raies").
Fitzinger, L. J. 1873 A, 57 (Rajæ).
Fürbringer, K. 1903 A, 369 ("rajiden").
Garman, S. 1913 A, 316.
Gaupp, E. 1905 D, 842 (Rajæ).
Gill, T. 1908 B, 160 (Raiidæ).
Goodrich, E. S. 1909 A, 160.
Hay, O. P. 1901 A, 545.
Hoernes, R. 1886 A, 545.
Huber, O. 1901 A, 636.
Imms, A. D. 1905 A, 46.
Jaekel, O. 1909 D, 717.
Jordan, D. S. 1905 A, i, 551; ii, 588.
1907 B, 208, 759.
1923 A, 103.
Jordan and Gilbert 1882 A, 39 (Raiidæ).
Kerr, J. S. 1900 A, 229 ("rays").
Kingsley, J. S. 1885 A, 87.
Klaatsch, H. 1893 C, 181.
Leigh-Sharpe, W. H. 1926 A, 341 (Raiidæ).
Leriche, M. 1906 C, 273.
Leunis and Ludwig 1883 A, 790.
Lubosch, W. 1909 A, 4 ("rochen").
Mayer, P. 1886 A, 273.
Müller, E. 1909 A, 512 ("rochen").
Owen, R. 1845 B, 43 (Raiidæ).
Pompeckj, J. F. 1913 A, 1130.
Rabinerson, A. 1925 A, 442, 445, 518 ("rochen").
Radcliffe, L. 1916 A, 271.
Rauther, M. 1913 A, 1099.
Regan, C. T. 1906 A, 724, 755 (Raiidæ).
Ridewood, W. G. 1921 A, 386 (Raiidæ).
Roth, W. 1911 A, 546, 547.
Sabatier, A. 1903 B, 1218 ("rajides").
1904 A, 252 ("raies").
Schauinsland, H. 1906 A, 407.
Terra, P. 1911 A, 203.
Wallace, A. R. 1876 A, ii, 462 (Raiidæ).
Zittel and Koken 1911 A, 66 (Rajinæ).
Zittel and Schlosser 1923 A, 72 (Rajinæ).
Zittel and Woodward 1902 A, 41.

Raja Linn. Type *R. batis* Linn.

Hay, O. P. 1902 A, 315.
Abel, O. 1906 C, 82.
1908 E, 409.
Agassiz, L. 1874 A, 131.
Allis, E. P. 1915 A, 577 (Raia).
Arldt, T. 1923 A, 489.
Backman, G. 1913 A.
Beer, G. R. 1926 A, 273, fig. 7.
Braus, H. 1901 B, 176, text-fig. 8.
Bridge, T. W. 1904 A, 461, 753 (Raia).
Briquel, P. 1898 A, 16.
Bronn, H. G. 1848 B, 1076.
1849 A, 639.
Carter, O. 1875 A, 67, pl. iv, fig. 4.
Coulon, L. 1903 A, 132 (Raia).
Daniel, J. F. 1922 A, figs. 18, 66, 71.
Dohrn, A. 1884 A, 139.
Dollo, L. 1910 A, 394.
Duméril, A. 1856 A, 137 ("raie").
Eastman, C. R. 1904 H, 71.
Fahrenholz, C. 1915 A, 407.
Fuchs, T. 1900 A, 6, pl., figs. 1, 2.
1907 C, 26.
Garman, S. 1913 A, 317 (Raia).
Gaupp, E. 1898 B, 860.
1905 D, 897.
Gegenbaur, C. 1870 B, 449, pl. xv, fig. 11.
1870 C, 406.
Giebel, C. G. 1855 A, 117.
Goette, A. 1878 A, 12.
Goodrich, E. S. 1906 A, 345.
1909 A, 515, figs.
Gregory, W. K. 1904 A, 62 (Raia).
Haller, G. 1923 A, 96, fig. 1.
Hamburger, R. 1904 A, 73.
Hay, O. P. 1901 B, 68.
Hoeven, J. 1822 A.
Hoffmann, L. 1912 A, 241, pls. xvii, xxi.
Huxley, T. H. 1853 A ("skate").
1876 E, 115 (Raia).
Imms, A. D. 1905 A, 46.
Jacobshagen, E. 1920 A, 92.
1923 A, 175.
Jaekel, O. 1901 A, 552.
1909 D, 718, fig. 9.
Jordan, D. S. 1905 A, i, 552; ii, 588.
1907 B, 209.
1917 A, 11.
1923 A, 103.
Jordan and Evermann 1917 A, 11.
Jordan and Gilbert 1882 A, 39 (Raia).
Kehrer, F. A. 1896 A, 349.
Kingsley, J. S. 1925 A, 235 (Raia).
Köstlin, O. 1844 A.
Kner, R. 1860 B, 817.
Leigh-Sharpe, W. H. 1921 A, 359.
1924 A, 567, figs. 1-15 (Raia).
1926 A, 352, figs. 5-8 (Raia).
Leriche, M. 1906 C, 420.
Leydig, F. 1852 A.
Lubosch, W. 1909 A, 3, fig. 4.
Lütken, C. L. 1874 A, 318.
Mayer, P. 1886 A, 231.
Meckel, J. F. 1825 A.
Meek, A. 1916 A, 42, 411 (Raia).
Meyer, G. H. 1847 A, 87.
Müller, E. 1909 A, 512.
Norman, E. W. 1926 A, 449, fig. 55.
Osburn, R. C. 1907 B, 179.
Owen, R. 1845 B, 44 (Raia).
1848 B, 196 (Raia).
1868 A, 904 (Raia).
Pouchet, G. 1878 A, 148, pl. iv.
Priem, F. 1908 B, 76, figs. 31-33.
Rabinerson, A. 1925 A, 435, 445, figs. 1, 4; 517, fig. 2.
Radcliffe, L. 1916 A, 271, pl. xlv.
Ridewood, W. G. 1896 A, 382, 386, figs. 7, 8 (Raia).
1921 A, 387, figs. 32-34 (Raia).
Rennie, J. 1906 A, 428 (Raia).
Reynolds, S. H. 1897 A, 32, 114 (Raia).
Roth, W. 1911 A, 546, pl. vi (Raia).
Ryder, J. 1887 A, 357 (Raia).
Sabatier, A. 1903 B, 1218 ("raie").
Sečerov, S. 1911 A, 8.
Sonies, F. 1907 A, 445.
Stannius, H. 1854 A.
Steinhard, O. 1903 A, 37.
Stephan, P. 1900 A, 311, 345, fig. 2.
Struck, W. 1915 A, 139, fig. 6.
Tomes, C. S. 1898 B, 444 (Raia).
Ussow, S. 1900 A, 233.
Williamson, C. W. 1851 A, 672, pl. xxx, fig. 28-32 (Raia).

Raja? dux Cope.

Hay, O. P. 1902 A, 316.
Eastman, C. R. 1904 H, 72, pl. xxviii, fig. 2 (This genus?).
Shattuck, G. B. 1904 A, cxvi (This genus?).
Upper Miocene (Calvert); Maryland.

Gryphodobatis Leidy. Type *G. uncus* Leidy.

Hay, O. P. 1902 A, 316.
Jordan, D. S. 1923 A, 104.

Gryphodobatis uncus Leidy.

Hay, O. P. 1902 A, 316.
Phosphate beds; South Carolina.

Oncobatis Leidy. Type *O. pentagonus* Leidy.

Hay, O. P. 1902 A, 316.
Hay, O. P. 1901 B, 68.
Jordan, D. S. 1923 A, 103.
Zittel and Woodward 1902 A, 42.

Oncobatis pentagonus Leidy.

Hay, O. P. 1902 A, 316.
Hay, O. P. 1927 D, 265, 268.
Pliocene or Pleistocene (Idaho); Idaho.

PRISTIDÆ Owen.

Owen, R. 1846 E, 51.
Hay, O. P. 1902 A, 316.
Abel, O. 1919 A, 124.
Aichel, O. 1919 A, 145.
Arldt, T. 1907 D, 283.
1923 A, 489.
Boulenger, G. A. 1917 B, 329.
Braus, H. 1906 A, 182 ("pristiden").
Bridge, T. W. 1904 A, 459.
Cope, E. D. 1869 L, 312.
1891 N, 17.
Cunningham, J. T. 1912 A, 246.
Dollo, L. 1889 F, 340.
1904 C, 48.
1922 A, 218.
Engel, H. 1909 A, 51 ("pristiden").
Fitzinger, L. J. 1873 A, 57 (Pristes).
Fowler, H. W. 1911 A, 80.
Garman, S. 1913 A, 258, 260.
Gill, T. 1905 A, 657.
Goodrich, E. S. 1909 A, 160.
Günther, A. C. 1870 A, 436.
Hay, O. P. 1901 B, 68.
Hoffmann, L. 1912 A, 239 ("pristiden").
Huber, O. 1901 A, 627.
Jacobshagen, E. 1923 A, 175 ("pristiden").
Jordan, D. S. 1905 A, i, 549 (Pristidiæ).
1907 B, 206, 759 (Pristididæ).
Jordan and Gilbert 1882 A, 36.
Radcliffe, L. 1916 A, 268.
Rauther, M. 1913 A, 1098.
Regan, C. T. 1906 A, 724 (Rhinobatidæ).
Pompeckj, J. F. 1913 A, 1127, 1129.
Ridewood, W. G. 1921 A, 380 (Pristinæ).
Roth, W. 1911 A, 544-545.
Schlosser, M. 1917 A, 139, 141 ("pristiden").
Stromer, E. 1905 B, 46, 55.
1912 A, 20.
1917 A, 23.
1917 B, 1*.
1925 A, 12, 18, 21.
Wallace, A. R. 1876 A, ii, 462.
Woodward, A. S. 1892 I, 533.
Zittel and Koken 1911 A, 64.
Zittel and Schlosser 1923 A, 70.
Zittel and Woodward 1902 A, 40.

PRISTIS Linck. Type *Squalus pristis* Linn.

Linck, H. F. 1790, Mag. neuest. Phys. Naturg., 31.
Hay, O. P. 1902 A, 316.
Abel, O. 1912 F, 514.
1919 A, 124, fig. 84.
1921 A, 156.
Agassiz, L. 1844 D, 142.
Aichel, O. 1919 A, 145.
Allis, E. P. 1913 A, 327.
Arldt, T. 1923 A, 489.
Backman, G. 1913 A, 45.
Bridge, T. W. 1904 A, 459, 752.
Bronn, H. G. 1849 A, 640.
Coulon, L. 1903 A, 130.
Daniel, J. F. 1922 A, 32, figs. 17, 36, 38, 41.
Dollo, L. 1889 F, 336.
1904 C, 48.
1910 A, 394.
1922 A, 218.
Duméril, A. 1856 A, 139 ("scie").
Engel, H. 1909 A, 53.
Fowler, H. W. 1911 A, 81.
Fraas, E. 1907 A, 1.
Fürbringer, M. 1902 A, 172.
Garman, S. 1913 A, 260.
Gaupp, E. 1898 B, 860.
Gegenbaur, C. 1870 B, 458, pl. xvi, fig. 28.
Gervais, P. 1852 A, explan. pl. lxviii.
1859 A, 519, pl. lxviii.
Giebel, C. G. 1855 A, 117.
Green, J. 1857 A, 67.
Hay, O. P. 1901 B, 68.
Heilprin, A. 1887 A, 300.
Hoffman, L. 1912 A, 240, 334, pls. xiii-xvi, xviii, xix.
Huber, O. 1901 A, 627.
Jacobshagen, E. 1923 A, 176.
Jaekel, O. 1902 E, 1078.
1925 C, 182.
Jordan, D. S. 1905 A, 199, 548.
1907 B, 207.
1917 A, 41, 49, 52.
Jordan, D. S. 1923 A, 102.
Jordan and Evermann 1917 A, 41, 49, 52.
Jordan and Gilbert 1882 A, 37.
Kemna, A. 1902 A, 233.
Klaatsch, H. 1890 A, 120, 123.
Köllicker, A. 1860 C, 144.
Köstlin, O. 1844 A.
Leriche, M. 1905 A, 97.
1906 C, 420.
1907 B, 337.
Mayer, P. 1886 A, 250.
Mivart, St. G. 1878 B, 311, 332.
Müller and Henle 1838 A, 89.
Owen, R. 1868 A, 902.
Pappenheim, P. 1905 A, 98.
1905 B, 397, figs. 1, 2, 6.
Priem, F. 1908 B, 92, 105, fig. 52.
Probst, J. 1886 B, 304.
Rabl, C. 1901 A, 527.
Radcliffe, L. 1916 A, 268, figs. 21, 22.
Reynolds, S. H. 1897 A, 109, 119.
Ridewood, W. G. 1896 A, 381, 384.
1921 A, 385, fig. 31.
Roth, W. 1911 A, 544, pls. vi, viii.
Schoenichen, W. 1900 A, 504.
Spengel, J. W. 1892 A, 147.
Stannius, H. 1854 A.
Steinhard, O. 1903 A, 35.
Stephan, P. 1900 A, 409.
Stromer, E. 1905 B, 46.
1917 A, 8.
1925 A, 18, 20.
Vigliarolo, G. 1891 A, 3.
Wagner, R. 1843 A ("sägefische").
Williamson, W. C. 1851 A, 677 ("sawfish").
Woodward, A. S. 1889 I, 3.
1892 I, 533.
1918 A, 194.
1921 B, 38.
Zittel and Schlosser 1923 A, 70.
Zittel and Woodward 1902 A, 40.

Pristis agassizi Gibbes.

Hay, O. P. 1902 A, 316.
Vigliarolo, G. 1891 A, 10, 26.
Eocene; South Carolina.

Pristis amblodon Cope.

Hay, O. P. 1902 A, 316.
Fowler, H. W. 1911 A, 81; fig. 39.
Hussakof, L. 1908 A, 34, fig. 11.
Vigliarolo, G. 1891 A, 12, 26.
Eocene; New Jersey.

Pristis attenuatus Cope.

Hay, O. P. 1902 A, 316.
Hussakof, L. 1908 A, 34, fig. 12.
Vigliarolo, G. 1891 A, 13, 26.
Tertiary; North Carolina.

Pristis brachyodon Cope.

Cope, E. D. 1869 L, 312.
Hay, O. P. 1902 A, 316.
Vigliarolo, G. 1891 A, 12, 26.
Eocene (Greensand); Virginia.

Pristis curvidens Leidy.

Hay, O. P. 1902 A, 316.
Fowler, H. W. 1911 A, 82; fig. 40.
Vigliarolo, G. 1891 A, 11, 26.
Upper Cretaceous (Manasquan?); New Jersey.

Pristis ensidens Leidy.

Hay, O. P. 1902 A, 316.
Vigliarolo, G. 1891 A, 12, 27
Miocene? (Phosphate beds); South Carolina.

Pristis sp. indet.

Emmons, E. 1858 B, 243, fig. 93.
Eocene; North Carolina.
Tuomey, M. 1848 A, 160.
Eocene; South Carolina.

Superfamily DASYATOIDÆ, new form.

Hay, O. P. 1902 A, 317 (Masticura).
Fowler, H. W. 1911 A, 84.
Garman, S. 1913 A, 259 (Dasybatoidei, Myloidea, Mobuloidea).
Goodrich, E. S. 1909 A, 163 (Centrobatoidei).
Gregory, W. K. 1907 D, 446 (Masticura).
Jaekel, O. 1911 A, 58 (Centrobati).
Jordan, D. S. 1905 A, i, 549 (Batoidei).
1907 B, 212 (Batoidei).
1923 A, 104 (Masticura).
Pompeckj, J. F. 1913 A, 1130 (Centrobati).
Ziegler, H. E. 1908 B, 656, pl. xxiii, fig. 1 (Torpedo).
Zittel and Koken 1911 A, 66 (Masticura).
Zittel and Schlosser 1923 A, 72 (Masticura).

PTYCHODONTIDÆ.

Hay, O. P. 1902 A, 317.
Abel, O. 1919 A, 139.
Goodrich, E. S. 1909 A, 165.
Hay, O. P. 1901 B, 68.
Hussakof, L. 1908 A, 41.
Jordan, D. S. 1923 A, 105.
Pompeckj, J. F. 1913 A, 1131.
Schlosser, M. 1917 A, 139, 141 ("ptychodontiden").
Zittel and Koken 1911 A, 68 (Ptychodontinæ).
Zittel and Schlosser 1923 A, 74 (Ptychodontinæ).

PTYCHODUS Agassiz. Type *P. mammillaris* Agassiz.

Hay, O. P. 1902 A, 317.
Abel, O. 1919 A, 139, fig. 103.
Arldt, T. 1907 D, 339.
Bronn, H. G. 1848 B, 1058.
1849 A, 648, 649.
Canavari, M. 1916 A, 35, pls. v-xiv.
Canestrelli, G. 1910 A, 102.
Coulon, L. 1903 A, 118.
Darton, N. H. 1908 A, 457.
Deecke, W. 1913 A, 86.
Dibley, G. E. 1911 A, 263.
Fossa-Mancini, E. 1921 A, 195.
Gaudry, A. 1896 A, 172, fig. 157.
Giebel, C. G. 1855 A, 115, pl. xlviii.
Goodrich, E. S. 1909 A, 165, fig. 128.
Gosselet, J. A. A. 1875 A, 12, 121.
Hay, O. P. 1901 B, 68.
Heilprin, A. 1887 A, 300.
Humphreys, J. 1908 A, 11.
Jordan, D. S. 1905 A, i, 557.
1907 B, 214.
1919 B, 194.
1923 A, 105.
Leriche, M. 1902 B, 89.
1906 C. 73
Mantell, G. A. 1844 A, 607, 616, fig. 127.
Oswald, F. 1851 A, 531.
Pompeckj, J. F. 1913 A, 1131.
Priem, F. 1896 B, 10.
1908 B, 46, 49.
Raffelt, R. 1877 A, 279.
Regan, C. T. 1906 A, 756.
Sauvage, E. 1867 A, 107.
Schlosser, M. 1917 A, 142.
Steinmann, G. 1907 A, 404.
Stephan, P. 1900 A, 409.
Storms, R. 1891 A, 115, 147.
Woodward, A. S. 1890 H, 38.
1898 B, 52.
1904 A, 133.
1904 B, 139.
1904 C, 190.
1912 A, 225, text-fig. 69.
1921 A, 180.
1921 B, 37.
1921 C, 180.
1922 C, 75.
Zittel and Koken 1911 A, 68.
Zittel and Schlosser 1923 A, 74, figs. 127, 128.
Zittel and Woodward 1902 A, 43.

Ptychodus anonymus Williston.

Hay, O. P. 1902 A, 317.
Cretaceous (Niobrara, Benton?); Kansas.

Ptychodus decurrens Agassiz.

Hay, O. P. 1902 A, 317.
Canestrelli, G. 1910 A, 102, 117.
Coulon, L. 1903 A, 119.
Dibley, G. E. 1911 A, 264, pl. xvii, fig. 2, pl. xix, figs. 20-24.
Fossa-Mancini, E. 1921 A, 195.
Gaudry, A. 1896 A, 172, fig. 157.
Gervais, P. 1852 A, explan. pl. lxxviii.
1859 A, 526, pl. lxxviii.
Leriche, M. 1902 B, 90, 94, pl. ii, figs. 19, 20.
1906 B, 348.
1906 C, 414.
Mantell, G. A. 1844 A, 617.
Oswald, F. 1851 A, 535.
Pompeckj, J. F. 1913 A, 1132, fig. 36.
Priem, F. 1896 B, 11.
1912 B, 265.
1913 A, 159.
Stefano, G. 1912 B, 60, pl. ii.
Woodward, A. S. 1904 A, 133, pl. xv, text-fig. 1.
1904 B, 140.
1912 A, 239, pls. li, lii; text-figs. 70, 71, 76, 77.
1922 C, 75, fig. 76.
Zittel and Koken 1911 A, 68, fig. 122.
Zittel and Woodward 1902 A, 43, fig. 86.
Cretaceous; Europe: Cretaceous; Arizona.

Ptychodus janevaii Cope.

Hay, O. P. 1902 A, 317.
Cretaceous (Niobrara); Kansas.

Ptychodus mammillaris Agassiz.

Hay, O. P. 1902 A, 318.
Canestrelli, G. 1910 A, 103.
Coulon, L. 1903 A, 118.
Dibley, G. E. 1911 A, 271, pl. xxii, figs. 3-5.
Leriche, M. 1902 B, 93, pl. ii, figs. 8-12.
1906 B, 348.
1906 C, 418.
Oswald, F. 1851 A, 535.
Priem, F. 1896 B, 11.
1908 B, pl. i, figs. 4-7.
Stefano, G. 1912 B, 61, pl. ii.
Woodward, A. S. 1890 H, 39, pl. i, figs. 3-14.
1912 A, 230, pl. xlvii, figs. 13-27, text-fig. 72.
Cretaceous; Europe: Cretaceous; Delaware.

Ptychodus martini Williston.

Hay, O. P. 1902 A, 318.
Mantell, G. A. 1844 A, 615, fig. 128.
Upper Cretaceous (Niobrara); Kansas.

Ptychodus occidentalis Leidy.

Hay, O. P. 1902 A, 318.
Upper Cretaceous (Niobrara); Kansas.

Ptychodus papillosus Cope.

Hay, O. P. 1902 A, 318.
Upper Cretaceous; Colorado.

Ptychodus parvulus Whiteaves.

Hay, O. P. 1902 A, 318.
Lambe, L. M. 1904 C, 21, 36, 41.
Upper Cretaceous (Colorado); Manitoba.

Ptychodus polygyrus Agassiz.

Hay, O. P. 1902 A, 318.
Canavari, M. 1916 A.
Canestrelli, G. 1910 A, 103, 114.
Coulon, L. 1903 A, 119.
Dibley, G. E. 1911 A, 268, pl. xx, figs. 1, 2; pl. xxi, figs. 1, 2.
Fossa-Mancini, E. 1921 A, 195.
Leriche, M. 1902 B, 97, pl. ii, figs. 21-23.
1906 B, 348.
1906 C, 420, pl. vi.
Mantell, G. A. 1844 A, 616, pl. vi, text-fig. 130 (P. polygurus).
Oswald, F. 1851 A, 535.
Priem, F. 1896 B, 11.
Stefano, G. 1912 B, 59, pl. ii.
Woodward, A. S. 1912 A, 232, pl. xlviii, figs. 12-16; pl. xlix.
1890 H, 40, pl. i, figs. 15-20.
Worthen, A. H. 1890 A, 4, fig. 6.
Zittel and Woodward 1902 A, 43, fig. 85.
Upper Cretaceous; Europe: Upper Cretaceous, Alabama, Kansas, Illinois (in glacial drift).

Ptychodus whipplei Marcou.

Hay, O. P. 1902 A, 318.
Cockerell, T. D. A. 1908 C, 162.
Freudenberg, W. 1921 A, 111 (P. whiplei).
Upper Cretaceous (Niobrara); Kansas, Colorado, New Mexico, Mexico.

Ptychodus sp. indet.

Hay, O. P. 1902 A, 318.
Cannon, G. L. 1890 B, 313.
Upper Cretaceous (Niobrara); Colorado.
Gilmore, C. W. 1921 E, 590.
Lower Cretaceous (Arundel); Maryland (This genus?).
Lee, W. T. 1917 A, 197.
Upper Cretaceous (Mancos); New Mexico.
McConnell, R. G. 1893 A, 48 D.
Cretaceous (Peace River); Athabasca.
Reeside, J. B. 1924 A, 11, pl. iii.
Upper Cretaceous (Mancos); Colorado.
Tuomey, M. 1848 A, 165, 166, 208 ("Ptychodus").
Tertiary; South Carolina.

PLATYCHODUS Yates. Type *Ptychodus mortoni* Mantell.

Yates, L. G. 1886 A, 20.
Hay, O. P. 1902 A, 317 (Hemiptychodus).
Fossa-Mancini, E. 1921 A, 195 (Hemiptychodus).
Jordan, D. S. 1923 A, 105 (Hemiptychodus).
Pompeckj, J. F. 1913 A, 1131 (Hemiptychodus).
Woodward, A. S. 1889 D, 149.

Platychodus mortoni (Mantell).

Hay, O. P. 1902 A, 317 (Hemiptychodus).
Dibley, G. E. 1911 A, 272, pl. xxii, figs. 7, 8 (Ptychodus).
Freudenberg, W. 1921 A, 111 (Ptychodus).
Hay, O. P. 1901 B, 68 (Hemiptychodus).
Hussakof and Bryant 1919 A, 155 (Hemiptychodus).
Leriche, M. 1902 B, 90 (Ptychodus).
Merrill, G. P. 1907 A, 17 (Ptychodus).
Smith, E. A. 1894 A, 280 (Ptychodus).
Spillman, W. 1863 A (Ptychodus).
Tuomey, M. 1850 B, 120 (Ptychodus).
Woodward, A. S. 1912 A, 244, pl. liv, fig. 1 (Ptychodus).
Yates, L. G. 1886 A, 20.

Upper Cretaceous; Alabama, Mississippi, Kansas, Mexico.

DASYATIDÆ.

Unless otherwise indicated the writers, as cited, employ for this family the name Trygonidæ.

Hay, O. P. 1902 A, 318 (Dasyatidæ).
Abel, O. 1912 F, 565.
1919 A, 126.
Arldt, T. 1907 D, 687.
1923 A, 489 ("trigoniden").
Bridge, T. W. 1904 A, 464.
Carus, V. 1875 A, 604.
Cope, E. D. 1891 N, 17.
Cunningham, J. T. 1912 A, 246.
Dollo, L. 1889 F, 341.
1904 C, 48.
Fitzinger, L. J. 1873 A, 57 (Trygones).
Fürbringer, K. 1903 A, 369 ("trygoniden").
Garman, S. 1913 A, 259, 373 (Dasybatidæ).
Gill, T. 1905 A, 658 (Dasybatidæ).
1908 B, 160 (Dasybatidæ).
Goodrich, E. S. 1909 A, 164.
Gregory, W. K. 1907 D, 446 (Dasyatidæ).
Hay, O. P. 1901 B, 68 (Dasyatidæ).
Hoernes, R. 1886 A, 545.
Huber, O. 1901 A, 629.
Imms, A. D. 1905 A, 46.
Jordan, D. S. 1905 A, i, 555 (Dasyatidæ).
1907 B, 212, 759 (Dasyatidæ).
1923 A, 104 (Dasyatidæ).
Jordan and Gilbert 1882 A, 45.
Jordan and Hannibal 1923 A, 59 (Urolophidæ).
Kingsley, J. S. 1885 A, 88.
Leigh-Sharpe, W. H. 1926 A, 341.
Leriche, M. 1906 C, 273.
1907 B, 339.
Leunis and Ludwig 1883 A, 791.
Lönnberg, E. 1910 A, 11.
Pompeckj, J. F. 1913 A, 1131.
Porta, A. 1905 A, 234.
Radcliffe, L. 1916 A, 273 (Dasybatidæ).
Rauther, M. 1913 A, 1099.
Regan, C. T. 1906 A, 724, 756 (Dasybatidæ).
Roth, W. 1911 A, 547.
Schlosser, M. 1917 A, 145 (Trigoninæ).
Stannius, H. 1854 A (Trygones).
Terra, P. 1911 A, 203.
Wallace, A. R. 1876 A, ii, 463.
Woodward, A. S. 1904 B, 140.
Zittel and Koken 1911 A, 66.
Zittel and Schlosser 1923 A, 72 (Trygoninæ).
Zittel and Woodward 1902 A, 42.

DASYATIS Rafinesque. Type *D. ujo* = *Raja pastinica* Linn.

Unless otherwise indicated the writers, as cited, use for this genus the name *Trygon*.

Hay, O. P. 1902 A, 319 (Dasyatis).
Abel, O. 1919 A, 131, fig. 93.
Agassiz, L. 1874 A, 134.
Allis, E. P. 1923 B, 124.
Arldt, T. 1923 A, 489 (Dasyatis, Trygon).
Baudelot, E. 1873 A, 95.
Bridge, T. W. 1904 A, 464.
Cockerell, T. D. A. 1906 A, 160 (Dasyatis).
Dollo, L. 1910 A, 394.
Duméril, A. 1856 A, 137 ("pastenague").
Evans, H. M. 1916 A, 431, figs. 1-7.
1923 A, 4, 28, pl. i, text-figs. 1-3.
Fahrenholz, C. 1915 A, 407.
Fürbringer, K. 1903 A, 368.
Fürbringer, M. 1903 A, 625.
Garman, S. 1913 A, 7, 373, 375 (Dasyatus).
Gaupp, E. 1898 B, 860.
1905 D, 870.
Gegenbaur, C. 1870 C, 422.
Goodrich, E. S. 1906 A, 350.
Hamburger, R. 1904 A, 73 (Dasyatis).
Haseman, J. D. 1912 A, 98 (Dasyatis).
Hay, O. P. 1901 B, 68 (Dasyatus).
Heilprin, A. 1887 A, 294, 300.
Huber, O. 1901 A, 629, pl. xxvii.
Jordan, D. S. 1905 A, i, 556; ii, 566 (Dasyatis).
1907 B, 213 (Dasyatis).
Jordan, D. S. 1917 A, 78.
1923 A, 104 (Dasyatis).
Jordan and Evermann 1917 A, 78 (Dasyatis).
Jordan and Gilbert 1882 A, 47, 65, 879.
Klaatsch, H. 1901 A, 435.
Leigh-Sharpe, W. H. 1926 A, 341.
Leriche, M. 1905 A, 100.
1906 C, 423.
Leunis and Ludwig 1883 A, 791.
Leydig, F. 1852 A (Dasyatis).
Müller and Henle 1838 A, 90.
Norman, E. W. 1926 A, 452.
Owen, R. 1845 B, 44.
Pompeckj, J. F. 1913 A, 1131.
Porta, A. 1905 A, 234.
Rabinerson, A. 1925 A, 448, 453, fig. 4; 518, fig. 1.
Radcliffe, L. 1916 A, 273, pl. xlvi (Dasybatus).
Reynolds, S. H. 1897 A, 106, 114.
Roth, W. 1911 A, 547, pls. vi, viii.
Schlosser, M. 1917 A, 144 (Xiphotrygon).
Sewertzoff, A. N. 1923 A, 391.
Stannius, H. 1854 A.
Steinhard, O. 1903 A, 39.
Solger, B. 1880 B, 476, pl. xxxix.
Zittel and Koken 1911 A, 66.
Zittel and Schlosser 1923 A, 72 (Xiphotrygon).
Zittel and Woodward 1902 A, 42.

Dasyatis carolinensis (Emmons).

Hay, O. P. 1902 A, 319.
Miocene; North Carolina, Virginia.

Dasyatis hastata? (De Kay).

Hay, O. P. 1902 A, 319.
Hay, O. P. 1923 A, 363.
Hussakof, L. 1908 A, 30 (This species?).
Leidy, J. 1860 B, 119, pl. xxvii, figs. 1, 2 (Pastinica).
Radcliffe, L. 1916 A, 273 (Dasybatus).
Pleistocene; South Carolina.

Dasyatis sp. indet.

Hay, O. P. 1902 A, 319.
Clark and Miller 1912 A, 167, 168 (Dosyatus).
Hay, O. P. 1923 A, 370.
Miocene (Calvert); Virginia: Pleistocene; Georgia.

HELIOBATIS Marsh. Type *H. radians* Marsh.

Marsh, O. C. 1877 D, 261.
Hay, O. P. 1902 A, 319 (Dasyatis in part).
Cope, E. D. 1879 O (Xiphotrygon).
1884 O, 49 (Xiphotrygon).
Jordan, D. S. 1923 A, 104 (Heliobatis, Xiphotrygon).
Regan, C. T. 1906 A, 756 (Xiphotrygon).
Seeley, H. G. 1886 A, 412 (Xiphotrygon).
Woodward, A. S. 1889 D, 153 (Xiphotrygon).
Zittel, K. A. 1890 A, 105 (Xiphotrygon).
Zittel and Woodward 1902 A, 42 (Xiphotrygon).

Heliobatis radians Marsh.

Marsh, O. C. 1877 D, 256.
Hay, O. P. 1902 A, 319 (Dasyatis).
Cockerell, T. D. A. 1908 C, 162 (Dasyatis).
Jordan, D. S. 1905 A, i, 557 (Xiphotrygon acutidens).
1907 B, 214 (X. acutidens).
Lower Eocene (Green River); Wyoming.

UROBATIS Garman. Type *Leiobatis sloani* Blainv.

Garman, S. 1913 A, 373, 401.
Abel, O. 1906 C, 82 (Urolophus).
Arldt, T. 1923 A, 489 (Urolophus).
Duméril, A. 1856 A, 144 (Urolophus).
Haswell, W. A. 1884 A, 103 (Urolophus).
Jordan, D. S. 1923 A, 104.
Jordan and Evermann 1896 A, 79 (Urolophus).
Jordan and Gilbert 1882 A, 46 (Urolophus).
Leriche, M. 1906 C, 423 (Urolophus).
Müller and Henle 1838 A, 90 (Urolophus).
1841 A, 173 (Urolophus).
Parker and Haswell 1897 A, 160, fig. 788 (Urolophus).

Urobatis halleri (Cooper).

Cooper, J. G. 1863, Proc. Calif. Acad. Sci. iii, 96 (Urolophus).
Arnold, R. 1903 A, 47, 346 (Urolophus. This species?).
Daniel, J. F. 1922 A, 10, 32, figs. 10-20, 36, 42 (Urolophus).
Garman, S. 1913 A, 403 (Urobatis).
Hay, O. P. 1927 D, 171.
Jordan, D. S. 1907 A, 120 (Urolophus. This species?).
Jordan and Evermann 1896 A, 80 (Urolophus).
Jordan and Gilbert 1919 A, 62 (Urobatis).
Jordan and Hannibal 1923 A, 59.
Recent; Coast of California to northern Mexico: Pleistocene; California.

MYLIOBATIDÆ Owen.

Owen, R. 1846 E, 51. (See Richardson).
Hay, O. P. 1902 A, 319.
Abel, O. 1906 C, 84.
1912 F, 565.
1919 A, 128.
Agassiz, L. 1874 A, 133.
Arldt, T. 1907 D, 666.
1923 A, 489 ("myliobatiden").
Bridge, T. W. 1904 A, 465, 747.
Carus, V. 1875 A, 604.
Cope, E. D. 1891 N, 17.
Cunningham, J. T. 1912 A, 246.
Dollo, L. 1889 F, 341.
1904 C, 48.
Duméril, A. 1856 A, 145 ("myliobatides").
Fitzinger, L. J. 1873 A, 57 (Myliobatæ).
Fowler, H. W. 1911 A, 84.
Garman, S. 1908 A, 251.
1913 A, i, 259, 427 (Mylibatidæ); 259 (Myloidei, in part).
Goodrich, E. S. 1909 A, 165.
Gill, T. 1865 B, 135 (Myliobatides, Myliobatinæ, Aëtobatinæ).
Gregory, W. K. 1907 D, 446.
Hay, O. P. 1901 B, 68.
Hoernes, R. 1886 A, 545.
Huber, O. 1901 A, 634.
Imms, A. D. 1905 A, 46.
Jaekel, O. 1902 B, 134 ("myliobatiden").
1903 G, 389 ("myliobatiden").
Jordan, D. S. 1905 A, i, 557.
1907 B, 214.
1923 A, 105.
Jordan and Gilbert 1882 A, 49.
Kingsley, J. S. 1885 A, 89.
Leriche, M. 1907 B, 339.
Leunis and Ludwig 1883 A, 792.
Lönnberg, E. 1910 A, 11.
Pompeckj, J. F. 1913 A, 1131.
Porta, A. 1905 A, 234.
Radcliffe, L. 1916 A, 277.
Rauther, M. 1913 A, 1099.
Richardson, J. 1846 A, 198.
Roth, W. 1911 A, 547-548.
Schlosser, M. 1917 A, 145 (Myliobatinæ).
Stromer, E. 1904 A, 249 ("myliobatiden").
1904 B, 203 ("myliobatiden").

Stromer, E. 1905 B, 38 (Myliobatidæ); 38, 43 (Myliobatinæ).
1912 A, 20.
Terra, P. 1911 A, 203.
Wallace, A. R. 1876 A, ii, 463.
Woodward, A. S. 1898 B, 53.
1904 B, 140.
Zittel and Koken 1911 A, 67 (Myliobatinæ).
Zittel and Schlosser 1923 A, 73 (Myliobatinæ).
Zittel and Woodward 1902 A, 43.

Myliobatis Duméril. Type *Raja aquila* Linn.

Hay, O. P. 1902 A, 319.
Abel, O. 1912 F, 435, fig. 320.
1919 A, 131, figs. 93, 95, 96.
Agassiz, L. 1874 A, 133.
Allis, E. P. 1923 B, 124.
Arldt, T. 1923 A, 489.
Bassani, F. 1905 A, 15.
Berry, E. W. 1916 A, 360.
Botti, U. 1877 A, 371 (Myliobates).
Bridge, T. W. 1904 A, 465.
Briquel, P. 1898 A, 16.
Bronn, H. G. 1848 A, 763 (Myliobates).
1849 A, 638.
Coulon, L. 1903 A, 131.
Daniel, J. F. 1922 A, figs. 9, 122, 125.
Deecke, W. 1913 A, 83 (Myliobates).
Dewey, M. 1918 A, 143, fig. 3.
Duméril, A. 1856 A, 138 (Myliobates).
Eastman, C. R. 1901 B, 98.
1904 H, 73.
Fowler, H. W. 1911 A, 84.
Fürbringer, K. 1903 A, 369.
Fürbringer, M. 1903 A, 625.
Garman, S. 1908 A, 252.
1913 A, 428.
Gaupp, E. 1905 D, 870.
Gegenbaur, C. 1870 C, 406.
Gervais, P. 1852 A, explan. pls. lxvii, lxxix (Myliobates).
1859 A, 518, pls. lxvii, lxxix (Myliobates).
Giebel, C. G. 1855 A, 117, pl. xlviii (Myliobates).
Goodrich, E. S. 1909 A, 166, fig. 130.
Harless, E. 1850 A, 843, pls. xxiii-xxv (Myliobates).
Haswell, W. A. 1884 A, 78.
Heilprin, A. 1887 A, 297, 300.
Huber, O. 1901 A, 634.
Humphreys, J. 1908 A, 12 (Myliobates).
Jacobshagen, E. 1923 A, 176.
Jaekel, O. 1911 A, 58, fig. 57.
Jordan, D. S. 1905 A, i, 557; ii, 582.
1907 B, 214.
1920 C, 573.
1923 A, 105.
Jordan and Beal 1913 A, 256.
Jordan and Gilbert 1882 A, 50.
Kingsley, J. S. 1925 A, 233, fig. 246.
Kner, R. 1860 B, 817.
Köstlin, O. 1844 A.
Leigh-Sharpe, W. H. 1926 A, 342.
Leriche, M. 1902 B, 101.
1905 A, 102.
1906 C, 418.
Leunis and Ludwig 1883 A, 792.
Mantell, G. A. 1844 A, 629.
Meckel, J. F. 1825 A (Raja).
Müller and Henle 1838 A, 91.
Owen, R. 1868 A, 894.
Priem, F. 1903 A, 396.
Priem, F. 1904 A, 285.
1908 B, 75, 93, figs. 48, 49.
1912 A, 242.
Probst, J. 1886 B, 305 (Myliobates).
Radcliffe, L. 1916 A, 277, pl. xlviii.
Ridewood, W. G. 1896 A, 381, 384.
1921 A, 392, fig. 37.
Sabatier, A. 1903 B, 1218 (Myliobates).
Semon, R. 1901 B, 132.
Serres, M. 1852 A, 117 (Myliobates).
Sloan, E. 1908 A, 278, 472.
Stannius, H. 1854 A.
Stefano, G. 1912 A, 413.
Stephan, P. 1900 A, 409.
Storms, R. 1891 A, 120 (Myliobates).
Stromer, E. 1904 A, 249.
1904 B, 203.
1905 B, 39.
1917 A, 19 (Mylobates).
Terra, P. 1911 A, 97, fig. 26.
Tomes, C. S. 1898 C, 346 (Myliobatis).
Weidenreich, F. 1926 A, 47.
Weiler, W. 1922 A, 96, pls. i, iii.
Woodward, A. S. 1889 I, 3, figs. 1, 2.
Zittel and Koken 1911 A, 67.
Zittel and Schlosser 1923 A, 73, figs. 123-125.
Zittel and Woodward 1902 A, 44.

Myliobatis bisulcus Marsh.

Hay, O. P. 1902 A, 320.
Fowler, H. W. 1911 A, 85, 87.
Eocene (Shark River); New Jersey.

Myliobatis copeanus Clark.

Hay, O. P. 1902 A, 320.
Clark and Miller 1912 A, 117, 118.
Eastman, C. R. 1901 B, 99, pl. xii, figs. 1, 2; pl. xiii, figs. 2*a*, 2*b*, 6, 7*a*, 7*b*.
Leriche, M. 1906 C, 187 (Syn. of M. dixoni).
Eocene (Nanjemoy and Aquia); Virginia, Maryland.

Myliobatis fastigiatus Leidy.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 74.
Fowler, H. W. 1911 A, 85, figs. 41, 42.
Hussakof, L. 1908 A, 32.
Eocene (Shark River); New Jersey.

Myliobatis frangens Eastman.

Eastman, C. R. 1904 H, 75, pl. xxix, fig. 3.
Shattuck, G. B. 1904 A, xcvi.
Miocene (Calvert); Maryland.

Myliobatis gigas Cope.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 73, pl. xxviii, fig. 3; pl. xxix, fig. 1.
Shattuck, G. B. 1904 A, xcvi.
Miocene (Calvert); Maryland.

Myliobatis glottoides Cope.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 73.
Fowler, H. W. 1911 A, 88, fig. 43.
Hussakof, L. 1908 A, 32, fig. 8.
Eocene (Shark River); New Jersey.

Myliobatis holmesii Gibbes.

Hay, O. P. 1902 A, 320.
Cope, E. D. 1867 C, 140.
Gibbes, R. W. 1850 B (No description).
1850 G, 299, pl. xlii, figs. 1-3.
Leidy, J. 1877 A, 234.
Woodward, A. S. 1889 D, 122.
(Phosphate beds); South Carolina.

Myliobatis jugosus Leidy.

Hay, O. P. 1902 A, 320.
Fowler, H. W. 1911 A, 90, fig. 45.
Leriche, M. 1905 A, 182, fig. 52 (This species?).
1906 B, 352 (This species?).
1906 C, 192, fig. 38.
Eocene (Manasquan?); New Jersey.

Myliobatis kummeli Fowler.

Fowler, H. W. 1911 A, 95, figs. 49, 50.
Miocene (Kirkwood); New Jersey.

Myliobatis leidyi Hay.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 73.
Fowler, H. W. 1911 A, 91, fig. 46.
Upper Cretaceous (Manasquan); New Jersey.

Myliobatis magister Leidy.

Leidy, J. 1877 A, 233, pl. xxxiii, fig. 7.
Eastman, C. R. 1901 B, 100, pl. xii, fig. 3; pl. xiii, figs. 1*a*, 1*b*.
1904 H, 74.
Fowler, H. W. 1911 A, 89, fig. 44.
Leidy, J. 1876 E, 86 (No description).
Upper Eocene (Manasquan); New Jersey: Eocene; South Carolina.

Myliobatis mordax Leidy.

Hay, O. P. 1902 A, 320.
Phosphate beds; South Carolina.

Myliobatis obesus (Leidy).

Hay, O. P. 1902 A, 320 (M. rugosus in part).
Fowler, H. W. 1911 A, 93, fig. 48.
Berry, E. W. 1916 A, 360.
Upper Cretaceous (Hornerstown, Vincentown, Manasquan); New Jersey: (Monmouth); Maryland,

Myliobatis pachyodon Cope.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 74, 75, pl. xxix, fig. 2.
Shattuck, G. B. 1904 A, xcvi.
Miocene (Calvert); Maryland.

Myliobatis pachyrhizodus Fowler.

Fowler, H. W. 1911 A, 97, fig. 51.
Cretaceous (Manasquan); New Jersey.

Myliobatis rectidens Cope.

Hay, O. P. 1902 A, 320.
Eastman, C. R. 1904 H, 73.
Fowler, H. W. 1911 A, 92, fig. 47.
Hussakof, L. 1908 A, 32, fig. 9.
Upper Cretaceous (Navesink-Hornerstown); New Jersey.

Myliobatis rugosus Leidy.

Hay, O. P. 1902 A, 320.
Eocene; New Jersey.

Myliobatis transversalis Gibbes.

Hay, O. P. 1902 A, 320.
Eocene; South Carolina.

Myliobatis vicomicanus Cope.

Hay, O. P. 1902 A, 320.
Miocene (Calvert); Maryland.

Myliobatis sp. indet.

Hay, O. P. 1902 A, 320.
Hay, O. P. 1923 A, 381. Pleistocene (Early); Florida.
Hopkins, F. V. 1871 A, 13. Eocene; Louisiana.
Tuomey, M. 1848 A, 165, 166. Eocene; South Carolina.

MESOBATIS Leidy. Type *Aëtobatus eximius* Leidy.

Hay, O. P. 1902 A, 320.
Jordan, D. S. 1923 A, 105.

Mesobatis eximius Leidy.

Hay, O. P. 1902 A, 320.
Phosphate beds; South Carolina.

STOASODON Cantor. Type *Raja narinari* (Euphrasen).

Unless otherwise indicated the authors, as quoted, use *Aëtobatus*.
Hay, O. P. 1902 A, 321.
Abel, O. 1906 C, 82 (Aëtobatis).
1912 F, 565 (Aëtobatis).
Arldt, T. 1923 A, 489 (Aëtobatis).
Bridge, T. W. 1904 A, 465, 729 (Aëtobatis).
Bronn, H. G. 1848 A, 18 (Aëtobatis).
1849 A, 638 (Aëtobatis).
Coulon, L. 1903 A, 131 (Aëtobatis).
Duméril, A. 1856 A, 145 (Aetobatys).
Eastman, C. R. 1901 B, 101 (Aëtobatis).
Fowler, H. W. 1911 A, 98 (Aetobatus).
Garman, S. 1908 A, 252.
1913 A, 428.
Giebel, C. G. 1855 A, 117 (Aëtobatis).
Gill, T. 1865 B, 135 (Aëtobatis).
Gudger, E. W. 1914 A.
Hamburger, R. 1904 A, 73.
Hay, O. P. 1901 B, 68.
1909 C, 59.
Heilprin, A. 1887 A, 300 (Aëtobatis).

Jordan, D. S. 1905 A, i, 557.
1907 B, 214.
1919 B, 242.
1923 A, 105.
Jordan and Beal 1913 A, 256 (Stoasodon).
Jordan and Evermann 1917 A, 95.
Jordan and Gilbert 1882 A, 50, 879 (Stoasodon).
Jordan and Hannibal 1923 A, 59 (Aëtobatus).
Klaatsch, H. 1901 A, 435.
Leriche, M. 1905 A, 107.
1906 C, 411 (Aëtobatis).
Müller and Henle 1838 A, 91 (Aëtobatis).
Owen, R. 1845 B, 46, pl. xxv, figs. 3, 4 (Myliobates, Aëtobatis).
Priem, F. 1903 A, 399.
1904 A, 286.
1908 B, 76, 94 (Aëtobatis).
Radcliffe, L. 1916 A, 278.
Ridewood, W. G. 1896 A, 384, 388.
Stromer, E. 1904 A, 260 (Aëtobatis).
1904 B, 205, fig. 3 (Aëtobatis).
Stannius, H. 1854 A (Aëtobatis).
Woodward, A. S. 1889 I, 5 (Aëtobatis).
Zittel and Koken 1911 A, 68.
Zittel and Schlosser 1923 A, 74 (Aëtobatis).
Zittel and Woodward 1902 A, 44.

Stoasodon aragonis Jordan and Hannibal.

Jordan and Hannibal 1923 A, 60, 61, pl. iii, figs. *m, p* (Aëtobatus).
Eocene (Arago); Oregon, California: (Tejon); California.

Stoasodon arcuatus (Agassiz).

Hay, O. P. 1902 A, 321 (Aëtobatus).
Clark and Miller 1912 A, 117, 118 (Aëtobatus).
Eastman, C. R. 1901 B, 102, pl. xiii, figs. 3*a*, 3*b*, 8 (Aëtobatus).
1904 H, 76, pl. xxix, fig. 5 (Aëtobatus).
Leriche, M. 1906 A, 295 (Aëtobatus).
Priem, F. 1912 A, 225 (Aëtobatus).
Shattuck, G. B. 1904 A, xcvi (Aëtobatus).
Miocene (Calvert and St. Mary's); Maryland: Eocene (Nanjemoy and Aquia); Maryland, Virginia.

Stoasodon merriami (Jordan and Beal).

Jordan and Beal 1913 A, 245, 256, fig. 6 (Myliobatis).
Jordan and Gilbert 1919 A, 23 (Myliobatis).
Jordan and Hannibal 1923 A, 60, pl. iii, fig. *z*; pl. iv, fig. i (Aëtobatis).
Miocene (Monterey); California.

Stoasodon narinari (Euphrasen).

Euphrasen, Bengt. And., 1790, Vet. Akad. Nya Handl., xi, 217 (Raja).
Coles, R. J. 1910 A, 338 (Aëtobatus).
Duméril, A. 1865 A (1870), 641 (Aëtobatus).
Gudger, E. W. 1910 A, 58 (Aëtobatus).
1914 A, pls. and figs. (Aëtobatus).
Hay, O. P. 1917 E, 43 (Aëtobatus).
1923 A, 382, 383 (Aëtobatis).
Jaekel, O. 1911 A, 58 (Aëtobatus).
Jordan, D. S. 1905 A, i, 557, fig. 349 (Aëtobatus).
1907 B, 214, fig. 155 (Aëtobatus).
Jordan and Evermann 1896 A, 88 (Aëtobatus).
1900 A, pl. xvi (Aëtobatus).
Owen, R. 1845 B, 47, pl. xxv, figs. 3, 4 (Myliobates, Aëtobates, Aëtobatis).
Radcliffe, L. 1916 A, 278, pl. xlvii (Aëtobatus).
Stannius, H. 1854 A, 90 (Aëtobatis).
Recent; Atlantic Coast to Virginia: Pleistocene; Florida.

Stoasodon perspicuus (Leidy).

Hay, O. P. 1902 A, 321 (Aëtobatus).
Fowler, H. W. 1911 A, 99, fig. 52 (Aëtobatus).
Eocene? (Shark River?); New Jersey.

Stoasodon profundus (Cope).

Hay, O. P. 1902 A, 321 (Aëtobatus).
Eastman, C. R. 1904 H, 76 (Aëtobatus).
Miocene (Calvert); Maryland.

Stoasodon smithii Jordan and Beal.

Jordan and Beal 1913 A, 254, fig. *b*.
Agassiz, L. 1857 A, 316, fig. (Zygobatis sp.).
Jordan and Hannibal 1923 A, 59, pl. iii, figs. *a, h, n*; pl. iv, fig. *f* (Aëtobatis).
Oligocene (Vanqueros): Miocene (Monterery): San Pablo Jacalitos): Pliocene (San Diego): Pleistocene (Upper San Pedro). All in California.

Stoasodon sp. indet.

Jordan, D. S. 1907 A, 119 (Aëtobatus). Miocene; California.

PLINTHICUS Cope. Type *P. stenodon* Cope.

Hay, O. P. 1902 A, 321.
Fowler, H. W. 1911 A, 100.
Jordan, D. S. 1923 A, 105.

Plinthicus stenodon Cope.

Hay, O. P. 1902 A, 321.
Fowler, H. W. 1911 A, 100, fig. 53.
Hussakof, L. 1908 A, 33, fig. 10.
Miocene (Kirkwood); New Jersey.

RHINOPTERIDÆ Jordan.

Jordan, D. S. 1923 A, 105.

RHINOPTERA Kuhl. Type *Myliobatis marginatus* Geoff. St. Hilaire.

Hay, O. P. 1902 A, 321.
Arldt, T. 1923 A, 489.
Bateson, W. 1892 A, 112, fig. 5.
Bridge, T. W. 1904 A, 465.
Fowler, H. W. 1911 A, 101.
Garman, S. 1908 A, 252.
1913 A, 443.
Giebel, C. G. 1855 A, 117 (Zygobates).

Hay, O. P. 1901 B, 68.
Jordan, D. S. 1905 A, i, 557.
1907 B, 214.
1919 B, 173.
Jordan and Evermann 1898 A, 90.
Jordan and Gilbert 1882 A, 51.
Müller and Henle 1838 A, 91.
Owen, R. 1866 A, 82.
Ridewood, W. G. 1921 A, 391, fig. 36.
Stannius, H. 1854 A.
Stromer, E. 1904 A, 251 (Zygobatis).
Woodward, A. S. 1889 I, 5.
Zittel and Schlosser 1923 A, 74.

Rhinoptera dubia Leidy.

Leidy, J. 1855 C, 396 (Zygobates).
Hay, O. P. 1902 A, 321.
Fowler, H. W. 1911 A, 102, figs. 54-57.
Leidy, J. 1877 A, 247, pl. xxxi, figs. 21-37. (Zygobates).
Upper Eocene; New Jersey: Miocene; Maryland, New Jersey.

Rhinoptera smithii Jordan and Beal.

Jordan and Beal 1913 A, 246, 254, fig. *e.*
Jordan and Gilbert 1919 A, 23.
Miocene (Monterey); California.

Rhinoptera sp. indet.

Hay, O. P. 1902 A, 321 Miocene; California.
Blake, W. P. 1857 A, 172 (Zygobates). Miocene; California.

MOBULIDÆ Gill.

Gill, T. 1893 A, 130.
Hay, O. P. 1902 A, 321 (Mantidæ).
Backman, G. 1913 A, 48 (Ceratopterina).
Fitzinger, L. J. 1873 A, 57 (Cephalopteræ).
Garman, S. 1913 A, 448.
Gill, T. 1908 B, 162.
Jordan, D. S. 1905 A, i, 559.
Jordan, D. S. 1907 B, 216, 759.
1923 A, 105.
Leigh-Sharpe, W. H. 1926 A, 342 (Dicerobatidæ).
Pellegrin, J. 1912 A, 91 ("diables de mer").
1912 B, 721 ("diables de mer").
Radcliffe, L. 1916 A, 279.

MANTA Bancroft. Type *Raia birostris* Walbaum.

Hay, O. P. 1902 A, 321.
Abel, O. 1919 A, 131, figs. 93, 94 (Ceratoptera).
Arldt, T. 1923 A, 489 (Ceratoptera).
Bridge, T. W. 1904 A, 465 (Ceratoptera).
Coles, R. J. 1916 A, 217, 8 figs.
1916 B, 649, figs. 1-5.
Duméril, A. 1856 A, 146 (Ceratoptera).
Garman, S. 1913 A, 449, 454.
Gill, T. 1908 B, 176.
Holmes, F. S. 1856 A, 39, pl. iii (Diabolichthys).
Jaekel, O. 1902 B, 134 (Ceratoptera).
Jordan, D. S. 1905 A, i, 560; ii, 580.
1907 B, 217.
Jordan, D. S. 1923 A, 105.
Jordan and Gilbert, 1882 A, 52.
Müller and Henle 1837 A, 401 (Ceratoptera).
1838 A, 91 (Ceratoptera).
Pellegrin, J. 1912 A, 91.
1912 B, 722.
Radcliffe, L. 1916 A, 279, 280.

Manta unios (Leidy).

Hay, O. P. 1902 A, 322.
Gill, T. 1908 B, 160 (Ceratoptera).
Phosphate beds; South Carolina.

Subclass HOLOCEPHALA Bonaparte.

Unless otherwise indicated the authors, as quoted, employ the name Holocephala, or Holocephali.

Hay, O. P. 1902 A, 322.
Abel, O. 1912 F, 440, 448, 677.
1919 A, 140.
1920 A, 330 ("holocephalen").
Allis, E. P. 1905 A, 495.
1915 A, 593 ("holocephalen").
1926 B, 334.
Arldt, T. 1907 D, 658.
1923 A, 490 ("holocephalen").
Backman, G. 1915 A.
Bardeleben, K. 1903 A, 20 ("holocephalen").
Bessels, E. 1869 A, 153 ("holocephalen").
Boas, J. E. V. 1914 B ("chimären").
Bonaparte, C. L. 1831 A, 98, 121 (Acanthorrini).
1838 C, 214.
1840 A, 46.
Bridge, T. W. 1896 A, 534.
1904 A, 466, 743.
Bronn, H. G. 1849 A, 830, seq.
Carter, J. T. 1905 A, 136.
Carus, V. 1875 A, 598.
Collinge, W. E. 1895 C, 888.
Cope, E. D. 1871 T, 449.
1885 BB, 64.
1891 N, 10, 14 (Holocephali, Chimæroidei).
Coulon, L. 1903 A, 132 ("holocéphales").
Cunningham, J. T. 1912 A, 246.
Day, E. C. H. 1865 A, 565.
Dean, B. 1900 A, 22, 27 (Holocephali).
1900 C, 169.
1903 A, 285 ("holocephala").
1906 B, ("chimaeroids").
1909 C, 243.
Dollo, L. 1889 E, 152 ("chimères").
1896 A, 110 ("holocéphales").
1904 C, 47 ("holocéphales").
1906 B, 135 ("holocéphales").
1907 B, 100 ("holocéphales).
Eastman, C. R. 1907 B, 23, 65.
1908 A, 69, 117.
1911 A, 20.
Fahrenholz, C. 1915 A, 407 ("holocephalen").
Fitzinger, L. J. 1873 A, 53.

Fowler, H. W. 1911 A, 108.
Frassetto, F. 1915 A ("olocefali").
Fuchs, H. 1909 B, 165 ("holocephalen").
Fürbringer, K. 1903 A, 362.
Fürbringer, M. 1902 A, 186 ("holocephalen").
1904 A ("holocephalen").
1904 B, 458 ("holocephalen").
Garman, S. 1904 A, 243 (Chismopnea).
1911 A, 81 (Chismopnea).
1913 A, 9 (Chismopnea).
Gaupp, E. 1898 B, 860 ("holocephalen").
1905 D, 873 ("holocephalen").
Gegenbaur, C. 1867 B, 378.
Gill, T. 1905 A, 657.
Goodrich, E. S. 1904 A, 471.
1909 A, 168.
Greene, J. R. 1861 A, 227.
Gregory, W. K. 1904 A, 58.
1907 D, 447.
Haeckel, E. 1868 A, 443, 444.
1873 A, 516.
1893 A, xviii.
Hase, A. 1907 A, 655 ("holocephalen").
Hilzheimer, M. 1913 A, 470.
Hoernes, R. 1886 A, 539.
Huber, O. 1901 A, 598.
Huxley, T. H. 1863 F, 372.
1876 E, 103.
Imms, A. D. 1905 A, 46.
Jacobshagen, E. 1920 A, 88 ("holocephalen").
Jaekel, O. 1901 A, 556 ("holocephalen").
1903 D, 59 ("holocephalen").
1903 F, 36 ("holocephalen").
1903 G, 383 ("holocephalen").
1906 C, 156 ("holocephalen").
1906 D, 180 ("holocephalen").
1911 A, 52.
1913 A, 91 ("holocephalen").
1919 A, 75, 91, 93.
1926 A, 172 ("holocephalen").
Jordan, D. S. 1905 A, i, 508, 561; ii, 575.
1907 B, 182, 219, 759.
1923 A, 105 (Chimæroidei).
Jordan and Gilbert 1882 A, 53.
1885 A, 71.
Keyes, C. 1922 A, pl. iii.
Kiaer, J. 1924 A, 108.
1928 A, 131.
Kingsley, J. S. 1900 A, 249.
1925 A, 654.
Klaatsch, H. 1893 B, 666 ("holocephalen").
1893 C, 148 ("holocephalen").
Lakjer, T. 1927 A, 289 ("holocephalen").
Latreille, P. A. 1825 A, 111 (Acanthorina).
Leigh-Sharpe, W. H. 1926 A, 336, 342.
Leunis and Ludwig 1883 A, 781.
Lönnberg, E. 1901 A.
1902 A.
Luther, A. 1909 A, 3, 30 ("holocephalen").
Lütken, C. 1868 C (Chimærini).
Mayhew, R. L. 1924 A, 331 ("chimæras).
Meek, A. 1916 A, 46, 412.
Müller, J. 1845 A, 137.
Nishi, S. 1920 A, 27 ("chimären").
Owen, R. 1845 B, 64 ("chimaeroids").
1866 A, 12, 35, 41.
Parker, T. J. 1886 A, 635.
Parker and Haswell 1897 A, 173.
Patten, W. 1912 A, 385.
Petronievics, B. 1919 A, 412 ("holocéphales").
Pompeckj, J. F. 1913 A, 1131.
Priem, F. 1908 B ("holocéphales").
Rabinerson, A. 1925 A, 450, 483.
Rabl, C. 1901 A, 489 ("holocephalen").
Rauther, M. 1913 A, 1099.
Regan, C. T. 1906 A, 726 (Chasmatopnea).
1912 A, 836.
Reis, O. M. 1893 A, 509 ("holocephalen").
1894 A, 62 ("holocephalen").
Reynolds, S. H. 1897 A, 106, 109, 111, 121, 543.
Ridewood, W. G. 1896 A, 386.
Rosén, N. 1916 A, 11.
Roth, W. 1911 A, 514.
Ryder, J. 1886 A, 74.
Sabatier, A. 1904 A, 249 ("holocéphales").
Sagemehl, M. 1883 A ("holocephalen").
Schauinsland, H. 1906 A, 360 ("holocephalen").
Schlosser, M. 1917 A, 136, 137, 139 ("holocephalen").
Schmalhausen, J. J. 1913 A, 61.
1918 A, 208.
1923 A, 537.
Semon, R. 1901 B, 133 ("holocephalen").
Sewertzoff, A. N. 1923 B.
1926 A, 536.
Shann, E. W. 1919 A, 532.
Stannius, H. 1854 A (Chimaerae).
Steinmann, G. 1907 A, 405.
Stensiö, E. A. 1925 B, 188.
Stephan, P. 1900 A, 313 ("holocéphales").
Stromer, E. 1912 A, 24, 48.
Suschkin, P. 1910 A, 248 ("holocephalen").
Terra, P. 1911 A, 204 (Holocephali).
Traquair, R. H. 1900 C, 506.
Van Wijhe, J. W. 1922 A, 291 ("holocephalen").
Versluys, J. 1922 B, 102.
Wilder, B. 1876 A, 183.
Woodward, A. S. 1915 B, lxix.
1922 C, 76.
1924 B, 338.
Zittel and Koken 1911 A, 69.
Zittel and Schlosser 1923 A, 47.
Zittel and Woodward 1902 A, 44.

Order CHIMÆROMORPHI, new name.

Superfamily CHIMÆROIDÆ new form.

Hay, O. P. 1902 A, 322 (Chimæroidea).
Barrell, J. 1915 B, 393.
Dean, B. 1900 A, 28 ("chimæroids").
1906 B, ("chimæroids").
1908 A, 204 ("chimæroids").
1912 A, 227 ("chimæroids").
Dollo, L. 1904 C, 47 ("chiméroides").
Eastman, C. R. 1900 J, 287 ("chimæroids").
1907 B, 23, 66 (Chimæroidei).
1908 A, 69, 118 (Chimæroidei).
Fowler, H. W. 1911 A, 109 (Chimæroidea).
Garman, S. 1904 A, 245 ("chimæroids").

Gegenbaur, C. 1870 C, 399 ("chimären").
Gill, T. 1905 B, 60 ("chimæroid").
Gregory, W. K. 1907 D, 447 (Chimæroidea).
Haeckel, E. 1873 A, 516 (Chimæracei).
Hussakof, L. 1906 A, 124 ("chimæroids").
Huxley, T. H. 1876 A, 57, 59 (Chimæroidei).
1876 E, 121, 124 (Chimæroidei).
Huxley, T. H. 1883 B, 571 (Chimæroideri).
Jaekel, O. 1901 A, 540 ("chimäriden").
Owen, R. 1845 B, 64 ("chimæroids").
1846 E, 51 (Chimæroidei).
Parker, T. J. 635 (Chimæra).
Regan, C. T. 1912 A, 836 (Chasmatopnea).
Woodward, A. S. 1921 B, 39 ("chimæroids").

CHIMÆRIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 98.
Hay, O. P. 1902 A, 323.
Abel, O. 1912 F, 665 ("chimæriden").
1919 A, 143.
Agassiz, L. 1844 D, 142 ("chimæridés").
Allis, E. P. 1917 A, 133 ("chimæroids").
Arldt, T. 1907 D, 645.
1923 A, 490 ("chimæriden").
Backman, G. 1915 A.
Bonaparte, C. L. 1833 B, 1203.
Bridge, T. W. 1904 A, 468.
Briquel, P. 1898 A, 16 ("chimères").
Cunningham, J. T. 1912 A, 246.
Cuvier, G. 1805 A ("chimères").
1815 A, 127 ("chimères").
Day, E. C. H. 1865 A, 565 ("Chimæroids").
Dean, B. 1900 C, 169 ("chimæroids").
1903 A, 270, 284 ("chimæroid").
1904 A, 51 ("chimæroid fishes").
1904 E, 105 ("chimæroids").
1906 B, ("chimæroids").
1912 B, 37 ("chimæroids").
Dollo, L. 1904 C, 50.
Egerton, P. G. 1852 C, 6B, 2 ("chimæroids").
Fitzinger, L. J. 1873 A, 54 (Chimærae).
Fowler, H. W. 1911 A, 109.
Fürbringer, M. 1902 A, 172 ("chimæriden").
1904 B ("chimäriden").
Garman, S. 1904 A, 271.
1911 A, 82.
1913 A, 9.
Gaupp, E. 1898 B, 841 ("chimæren").
Gegenbaur, C. 1866 A, 123 ("chimæren").
1867 B, 391 ("chimæren").
1870 B, 448 ("chimæren").
Goodrich, E. S. 1909 A, 176.
Gregory, W. K. 1907 D, 447.
Hay, O. P. 1901 B, 68.
Hoernes, R. 1866 A, 539.
Huber, O. 1901 A, 636.
Humphreys, J. 1908 A, 11 ("chimæras").
Huxley, T. H. 1859 D, 418 (Chimæræ).
1876 E, 86.
Jaekel, O. 1901 A, 540 ("chimäriden").
1902 A, 107 ("chimäriden").
1903 G, 386 ("chimäriden").
1928 A, 43 ("chimæren").
Jordan, D. S. 1905 A, i, 564.
1907 B, 221, 759.
1923 A, 106.
Jordan and Gilbert 1882 A, 53.
Kingsley, J. S. 1885 A, 72.
Köstlin, O. 1844 A ("chimären").
Leriche, M. 1906 C, 273.
Leunis and Ludwig 1883 A, 781.
Meckel, J. F. 1825 A ("chimæren").
Owen, R. 1846 E, 51 (Edaphodontidæ).
1866 A, 13.
Parker and Haswell 1897 A, 174.
Pompeckj, J. F. 1913 A, 1132 ("chimæriden").
Rauther, M. 1913 A, 1099.
Schauinsland, H. 1903 A, 5, pls. xii-xviii, xxi-xxiv (Callorhynchus).
Schlosser, M. 1917 A, 141.
Stannius, H. 1854 A (Chimæræ).
Storms, R. 1894 A, 67 ("chimérides").
Terra, P. 1911 A, 204.
Traquair, R. H. 1900 C, 506 ("chimæroids").
Wagner, R. 1843 A ("chimären").
Wallace, A. R. 1876 A, ii, 460.
Woodward, A. S. 1912 A (1909), 182.
1920 B, 5 ("chimæroids").
Zittel and Koken 1911 A, 70.
Zittel and Schlosser 1923 A, 76.
Zittel and Woodward 1902 A, 46.

CHIMÆRA Linn. Type *C. monstrosa* Linn.

Hay, O. P. 1902 A, 324.
Abel, O. 1912 F, 440, fig. 324.
Allis, E. P. 1905 A, 472.
1909 A, 74.
1917 A, 105, pls. i-iii.
1922 B, 199.
1923 B, 156.
Arldt, T. 1923 A, 490.
Bessels, E. 1869 A, 154.
Braus, H. 1906 B, 553.
Bridge, T. W. 1904 A, 469, 735.
Bronn, H. G. 1848 A, 290.
Collinge, W. E. 1895 C, 878.
Davidoff, M. 1879 A, 470.
Dean, B. 1900 A, 28.
1904 B, 14.
Evans, H. M. 1923 A, 16, 29.
Garman, S. 1911 A, 83.
Gaupp, E. 1905 D, 873.
Goette, A. 1878 A, 841.
Goodrich, E. S. 1901 A, 313, fig. B.
Gregory, W. K. 1904 A, 57, fig. 11.
Hay, O. P. 1901 B, 68.
Hoeven, J. 1822 A.
Huxley, T. H. 1863 F, 372, 428, figs. 30, 31.
1869 G, 453.
Jaekel, O. 1901 A, 547.
1903 F, 36 (Chimarra).
1905 C, 146, fig. 14.
1906 A, 16, fig. 9.
1926 A, 173.
1926 B, 42 ("chimæren").
1926 D, 71 ("holocephalen").
Jaquet, M. 1897 A, 174, pls. v-viii.
1898 B, 300, pls. xxiv-xxix.
1900 A, 60.

Jordan, D. S. 1905 A, i, 563; ii, 563.
1917 A, 11.
1923 A, 106.
Jordan and Evermann 1917 A, 11.
Kerr, J. G. 1908 A, 169.
Kingsley, J. S. 1925 A, 29, 88, figs. 30, 91.
Klaatsch, H. 1893 A, 148.
Kolmer, W. 1923 A, 529, figs. 1, 2 (Chimära).
Lakjer, T. 1927 A, 283.
Leidig, F. 1851 A, 241.
Leigh-Sharpe, W. H. 1926 A, 343.
Luther, A. 1909 A, 31.
Meek, A. 1916 A, 45, 46.
Mivart, St. G. 1878 B, 331.
Nishi, S. 1920 A, 28, figs. 1-8.
Norman, E. W. 1926 A, 452.
Parker, W. K. 1879 C, 336.
Parker and Haswell 1897 A, 174, figs. 799-802.
Rabinerson, A. 1925 A, 443, 450, fig. 3; 483. fig. 1; 513.
Reynolds, S. H. 1897 A, 536.
Romer, A. S. 1928 A, 433.
Ryder, J. 1885 E, 91.
Sewertzoff, A. N. 1923 A, 391.
Schmalhausen, J. J. 1916 C, 213.
Shann, E. W. 1919 A, 547.
Solger, B. 1879 A, 95, pl. viii.
Stephan, P. 1900 A, 311.
Versluys, J. 1922 B, 98.
Zittel and Schlosser 1923 A, 75, fig. 129
At present no fossil American species of this genus is known.

EDAPHODON Buckland. Type *Chimæra mantelli* Buckland.

Hay, O. P. 1902 A, 324.
Abel, O. 1919 A, 145, fig. 111.
Bronn, H. G. 1848 A, 452.
1849 A, 637.
Coulon, L. 1903 A, 133 (Ischyodus).
Dean, B. 1906 B, 134, 150, fig. 123.
1909 C, 259 (Ischyodus).
Egerton, P. G. 1843 A, 155 (Ischyodus).
1852 C, 6 B, 2.
Fowler, H. W. 1911 A, 110.
Giebel, C. G. 1855 A, 118.
Hay, O. P. 1901 B, 68.
Hussakof, L. 1912 A, 202, fig. 18*a*.
Jaekel, O. 1901 A, 547.
Jordan, D. S. 1919 B, 191.
1923 A, 106.
Leriche, M. 1905 A, 137.
1906 C, 414.
Newton, E. T. 1876 A, 329.
Owen, R. 1845 B, 66, 67.
Priem, F. 1907 C, 42.
1908 B, 42.
Probst, J. 1886 B, 312.
Storms, R. 1894 A, 73.
Woodward, A. S. 1912 A (1909), 183, pl. xxxix, text-figs. 52-55.
1912 A (1911), 185, pls. xl, xli.
1922 C, 76, fig. 77.
Zittel and Koken 1911 A, 72.
Zittel and Schlosser 1923 A, 77, fig. 132.
Zittel and Woodward 1902 A, 48.

Edaphodon agassizi (Buckland).

Buckland, W. 1835, Proc. Geol. Soc. Lond., ii, 206 (Chimaera).
Hay, O. P. 1902 A, 324 (E. smockii).
Agassiz, L. 1843 B, 341, pl. xl, *a*, figs. 3, 4; pl. xl, *c*, fig. 16 (Chimæra).
Egerton, P. G. 1843, Proc. Geol. Soc. Lond., iv, 156 (Ischyodus).
Fowler, H. W. 1911 A, 115, fig. 66 (E. smockii).
Geinitz, H. B. 1875 A, 206, pl. xxxix, figs. 8-10 (Chimæra).
Hussakof, L. 1908 A, 39, pl. ii, figs. 4, 5 (E. smockii).
1912 A, 213, figs. 10, 11 (Ischyodus smockii a syn.).
Newton, E. T. 1878 C, 12, pl. iii.
Woodward, A. S. 1891 A, 77.
Cretaceous (Danian); Europe: Cretaceous (Hornerstown); New Jersey.

Edaphodon eocænus (Cope).

Hay, O. P. 1902 A, 324.
Fowler, H. W. 1911 A, 116, fig. 67.
Hussakof, L. 1908 A, 37, fig. 14.
Eocene (Shark River); New Jersey.

Edaphodon laqueatus (Leidy).

Hay, O. P. 1902 A, 324.
Hussakof, L. 1912 A, 200, 217, fig. 13.
Upper Cretaceous; Mississippi.

Edaphodon laterigerus (Cope).

Hay, O. P. 1902 A, 324.
Fowler, H. W. 1911 A, 113, fig. 65.
Hussakof, L. 1908 A, 38, pl. i, figs. 7, 8.
1912 A, 211, fig. 8.
Upper Cretaceous (Hornestown); New Jersey.

Edaphodon mirificus Leidy.

Hay, O. P. 1902 A, 324 (E. divaricatus, E. fecundus, E. gaskillii, E. incrassatus, E. latidens, E. longirostris, E. miersii, E. monolophus); 325 (E. solidulus).
Cope, E. D. 1871 G, 384 (Ischyodus solidulus).
Fowler, H. W. 1911 A, 113 (Ischyodus longirostris); 122, figs. 71-75 (E. mirificus); 119, figs. 69, 70 (E. fecundus); 118, fig. 68 (E. incrassatus); 124, fig. 76 (E. divaricatus); 128, fig. 78 (E. latidens); 123 (E. miersii); 127, fig. 77 (E. solidulus); 123 (Ischyodus monolophus, I. gaskilli).
Hussakof, L. 1908 A, 38; pl. ii, fig. 3, text-figs. 3-7 (E. mirificus); pl. i, figs. 1-4 (E. fecundus); pl. i, figs. 5, 6 (E. incrassatus); 38, text-fig. 15 (E. latidens); 39, pl. ii, figs. 1, 2 (E. solidulus).
1912 A, 204, pl. xix; pl. xx, figs. 1-3; text-figs. 2*a*-7 (E. divaricatus fecundus, gaskillii, incrassatus, latidens, longirostris, miersii, monolophus, solidulus, as syns.).
Upper Cretaceous (Hornerstown); New Jersey.

Edaphodon stenobryus (Cope).

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, iii, fig. 63.
Hussakof, L. 1908 A, 39, pl. ii, figs. 6, 7.
1912 A, 203, 213, figs. 2*e*, 9.
Upper Cretaceous (Hornerstown); New Jersey.

Edaphodon tripartitus (Cope).

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 112, fig. 64.
Hussakof, L. 1908 A, 40, pl. iii, figs. 5, 6 (E. longirostus a syn.).
1912 A, 215, fig. 12 (E. sedgwicki).
Upper Cretaceous (Hornerstown); New Jersey.

Edaphodon sp. indet.

Fowler, H. W. 1911 A, 129-131, figs. 79-82 (Undetermined specimen).
Upper Cretaceous (Hornerstown); New Jersey.

ELASMODUS Egerton. Type *E.* (*Chimæra*) *hunteri Egert.*

Egerton, P. G. 1843 A, 156.
Dean, B. 1909 C, 267.
Egerton, P. G. 1847 A, 351.
Jordan, D. S. 1919 B, 214.
1923 A, 106.
Newton, E. T. 1876 A, 329.
Nicholson and Lydekker 1889 A, 951.
Woodward, A. S. 1898 B, 59, figs. 46, 47.
1891 A, 88.
Zittel, K. A. 1890 A, 112.

Elasmodus? gilli, new species.

Darton and Siebenthal 1910 A, 10 ("chimæroid fish").
Dean, B. 1909 C, 265, pl. xxxvii ("egg-capsule," Elasmodus?).
Gill, T. 1905 B, 601 ("chimæroid egg-case").
Hussakof, L. 1912 A, 224 ("fossil egg-case").
Upper Cretaceous (Mesaverda); Wyoming.

MYLOGNATHUS Leidy. Type *M. priscus* Leidy.

Hay, O. P. 1902 A, 325.
Dean, B. 1906 B, 134, 150.
Hay, O. P. 1901 B, 68.
Jordan, D. S. 1923 A, 106.
Osborn, H. F. 1902 I, 16.

Mylognathus priscus Leidy.

Hay, O. P. 1902 A, 325.
1903 D, 117.
Osborn, H. F. 1902 I, 11.
Paleocene (Fort Union); North Dakota.

BRYACTINUS Cope. Type *B. amorphus* Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 134.
Hay, O. P. 1901 B, 68.
Hussakof, L. 1912 A, 223.
Jordan, D. S. 1919 B, 191 (syn. of Edaphodon).
1923 A, 106.

Bryactinus amorphus Cope.

Hay, O. P. 1902 A, 325.
Cope, E. D. 1875 E, 282, pl. xlv, fig. 13.
Fowler, H. W. 1911 A, 134; fig. 83.
Hussakof, L. 1908 A, 37, fig. 13.
1912 A, 223; figs. 19, 20.
Upper Cretaceous (Hornerstown); New Jersey.

ISOTÆNIA Cope. Type *I. neocæsariensis* Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 135.
Hay, O. P. 1901 B, 68.
Hussakof, L. 1912 A, 222, fig. 18*b*.
Jordan, D. S. 1923 A, 106.

Isotænia neocæsariensis Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 135, fig. 84.
Hussakof, L. 1908 A, 41; pl. iii, figs. 3, 4.
1912 A, 222, fig. 7.
Upper Cretaceous (Hornerstown); New Jersey.

LEPTOMYLUS Cope. Type *L. densus* Cope.

Hay, O. P. 1902 A, 325.
Dean, B. 1906 B, 134.
Fowler, H. W. 1911 A, 136.
Hussakof, L. 1912 A, 218.
Jordan, D. S. 1923 A, 106.
Palmer, T. S. 1904 A, 372, 843.
Storms, R. 1894 A, 73.

Leptomylus cookii Cope.

Hay, O. P. 1902 A, 325.
Cope, E. D. 1871 Q, 384.
Fowler, H. W. 1911 A, 137; fig. 85.
Hussakof, L. 1908 A, 41; pl. ii, figs. 8, 9.
1912 A, 219, fig. 14.
Upper Cretaceous (Navesink-Hornerstown); New Jersey.

Leptomylus densus Cope.

Hay, O. P. 1902 A, 325.
Cope, E. D. 1871 Q, 384.
Fowler, H. W. 1911 A, 138.
Hussakof, L. 1912 A, 218.
Upper Cretaceous (Navesink-Hornerstown); New Jersey.

Leptomylus forfex Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 139; fig. 86.

Hussakof, L. 1908 A, 41; pl. iii, figs. 1, 2.
1912 A, 221; figs. 15, 16.
Upper Cretaceous (Navesink-Hornerstown); New Jersey.

SPHAGEPŒA Cope. Type *S. aciculata* Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 143.
Hay, O. P. 1901 B, 68.
Jordan, D. S. 1923 A, 106.

Sphagepœa aciculata Cope.

Hay, O. P. 1902 A, 325.
Fowler, H. W. 1911 A, 144, fig. 89.

Hussakof, L. 1908 A, 50, fig. 22.
1912 A, 224, fig. 21.
Upper Cretaceous (Hornerstown); New Jersey.
The systematic positions of the following three genera are not known.

DICTYORHABDUS Walcott. Type *D. priscus* Walcott.

Hay, O. P. 1902 A, 325.
Clarke, J. M. 1895 A, 121 ("fossil fishes").
Jordan, D. S. 1905 A, i, 565, ii, 566.
1923 A, 106.
Romer, A. S. 1928 A, 433.
Stromer, E. 1920 A, 10.
Vaillant, L. 1902 A, 1321 ("poissons." This genus?).
Walcott, C. D. 1891 A, 245 ("fish").

Dictyorhabdus priscus Walcott.

Hay, O. P. 1902 A, 325.
Cockerell, T. D. A. 1908 C, 162.
Dean, B. 1906 B, 133, figs. 113, 114.
Eastman, C. R. 1907 B, 12, 67.
1908 A, 119.
Jaekel, O. 1892 C, 168 ("fish remains").
1895 D, 162.
Jordan, D. S. 1907 B, 222.
Merrill, G. P. 1907 A, 10.
Ordovician; Colorado.

HEDRONCHUS Cope. Type *H. sternbergi* Cope.

Hay, O. P. 1902 A, 326.
Cockerell, T. D. A. 1908 C, 162.
Jordan, D. S. 1923 A, 106.

Hedronchus sternbergi Cope.

Hay, O. P. 1902 A, 326.
Bowen, C. F. 1915 A, 118, 149, 150.

Cockerell, T. D. A. 1908 C, 162.
Hatcher, J. B. 1905 B, 69 (H. sternbergii).
Osborn, H. F. 1902 I, 11, 16.
Sternberg, C. H. 1903 C, 872 ("Hedronchus").
1914 A, 134.
Upper Cretaceous (Judith River); Montana.

MYLEDAPHUS Cope. Type *M. bipartitus* Cope.

Hay, O. P. 1902 A, 326.
Cockerell, T. D. A. 1908 C, 162.
Cope, E. D. 1880 U, 148.
Jordan, D. S. 1923 A, 106.
Osborn, H. F. 1902 I, 16.
Priem, F. 1901 A, 500.
Stanton and Hatcher 1905 A, 38.
Sternberg, C. H. 1909 A, 113.
1917 A, 84, 116.
Williston, S. W. 1902 K, 953 (=?Rhombodus).

Myledaphus bipartitus Cope.

Hay, O. P. 1902 A, 326.
Bowen, C. F. 1915 A, 118, 148, 149.
Brown, B. 1914 E, 378.
Cockerell, T. D. A. 1908 C, 162.
Gilmore, C. W. 1916 D, 302, pl. lxxvii, fig. 4 (This species?).
1924 D, 27.
Hatcher, J. B. 1903 D, 372.
1905 B, 68.
Hay, O. P. 1910 A, 313.
1910 B, 296.
Hussakof, L. 1908 A, 32, fig. 7.
Lambe, L. M. 1902 A, 28, pl. xix, figs. 1, 2.

Lambe, L. M. 1904 C, 21, 36, 41.
1907 B, 179.
1914 H, 398, 401.
1915 B, 120.
Matthew, W. D. 1916 A, 485.
Osborn, H. F. 1902 I, 11.
Peale, A. C. 1912 A, 746, 754.
Priem, F. 1901 F, 500.
Sternberg, C. H. 1903 B, 357.
1903 C, 871.
1909 C, 78, fig. 13.
1914 A, 134.
1915 A, 132.
1924 A, 68 (Myladephus).
Sternberg, C. M. 1926 A, 103, 104.
Williston, S. W. 1902 K, 953.
Upper Cretaceous (Judith River); Montana: (Belly River); Alberta: (Lance); Wyoming, Saskatchewan.

Myledaphus sp. indet.

Gilmore, C. W. 1920 A, 8. Upper Cretaceous (Kirtland); New Mexico.
Reeside, J. B. 1924 A, 23. Upper Cretaceous (Kirtland); New Mexico.

ICHTHYODORULITES.

Hay, O. P. 1902 A, 326.
Agassiz, L. 1835 B, 337.
1835 I, 101.
1839 A, 597.
Bronn, H. G. 1848 A, 604.
Dollo, L. 1889 F, 335.
Eastman, C. R. 1908 A, 150.
Fowler, H. W. 1911 A, 141.
Jordan, D. S. 1923 A, 96.
Reynolds, S. H. 1897 A, 106.
Zittel and Koken 1911 A, 72 ("ichthyodorylithen").
Zittel and Schlosser 1923 A, 78.
Zittel and Woodward 1902 A, 48.

ACONDYLACANTHUS St. John and Worth. Type *A. gracilis* St. John and Worth.

Hay, O. P. 1902 A, 329.
Hussakof, L. 1908 A, 43.
Jordan, D. S. 1920 C, 425.
1923 A, 96, 106.

Acondylacanthus æquicostatus St. John and Worth.

Hay, O. P. 1902 A, 329.
Hussakof and Bryant 1919 A, 156.
Mississippian (Keokuk); Illinois.

Acondylacanthus gracilis St. John and Worth.

Hay, O. P. 1902 A, 329.
Mississippian (Kinderhook); Iowa.

Acondylacanthus? mudgianus St. John and Worth.

Hay, O. P. 1902 A, 330.
Pennsylvanian; Kansas.

Acondylacanthus nuperus St. John and Worth.

Hay, O. P. 1902 A, 330.
Pennsylvanian; Illinois.

Acondylacanthus rectus St. John and Worth.

Hay, O. P. 1902 A, 330.
Pennsylvanian; Illinois.

AMACANTHUS St. John and Worth. Type *Homocanthus gibbosus* Newb. and Worth.

Hay, O. P. 1902 A, 329.
Jordan, D. S. 1923 A, 96.

Amacanthus gibbosus (Newb. and Worth.).

Hay, O. P. 1902 A, 329.
Mississippian (St. Louis); Missouri, Illinois.

ANODONTACANTHUS Davis. Type *A. acutus* Davis, here chosen.

Davis, J. D. 1881 B, 427.
Case, E. C. 1915 A, 124.
Hussakof, L. 1911 A, 162.
Hussakof and Bryant 1919 A, 157.
Jordan, D. S. 1920 C, 415 (Syn. of Oracanthus).
1923 A, 92.
Traquair, R. H. 1888 A, 101.
Woodward, A. S. 1889 D, 2 (Syn. Pleuracanthus).

Anodontacanthus americanus Hussakof.

Hussakof, L. 1911 A, 162, pl. xxvi, fig. 5.
Case, E. C. 1915 A, 96.
Permian (Wichita , Clear Fork); Texas.

Anodontacanthus pusillus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 156, pl. xliv, fig. 2.
Upper Devonian (Genesee); New York.

APATEACANTHUS Woodward. Type *A. vetustus* (Clarke).

Hay, O. P. 1902 A, 331.
Eastman, C. R. 1907 B, 80.
Jordan, D. S. 1923 A, 107.
Lydekker, R. 1914 A, 652.

Apateacanthus vetustus (Clarke, J. M.).

Hay, O. P. 1902 A, 331.
Clarke and Ruedemann 1903 A, 768 (Pristacanthus).
Eastman, C. R. 1907 B, 17, 81, 225, pl. iii, fig. 5.
Merrill, G. P. 1907 A, 17 (Pristacanthus).
Upper Devonian (Portage); New York.

ASTEROPTYCHIUS M'Coy. Type *A. ornatus* M'Coy.

Hay, O. P. 1902, A, 330.
Barkas, W. J. 1874 D, 544.
Bronn, H. G. 1849 A, 653.
Jordan, D. S. 1919 B, 239.

Asteroptychius bellulus St. John and Worth.

Hay, O. P. 1902 A, 330.
Pennsylvanian; Illinois, Iowa.

Asteroptychius elegans Newb.

Hay, O. P. 1902 A, 330.
Hussakof, L. 1908 A, 43.
Mississippian (Waverly); Michigan.

Asteroptychius gracilis Newb.

Hay, O. P. 1902 A, 330.
Hussakof, L. 1908 A, 43, fig. 17.
Mississippian (St. Louis); Illinois.

Asteroptychius keokuk St. John and Worth.

Hay, O. P. 1902 A, 330.
Mississippian (Keokuk); Illinois.

Asteroptychius sancti-ludovici St. John and Worth.

Hay, O. P. 1902 A, 330.
Mississippian (St. Louis); Illinois, Missouri.

Asteroptychius tenellus St. John and Worth.

Hay, O. P. 1902 A, 330.
Pennsylvanian; Kansas.

Asteroptychius? tenuis St. John and Worth.

Hay, O. P. 1902 A, 330.
Mississippian (Chester); Illinois.

Asteroptychius triangularis Newb. and Worth.

Hay, O. P. 1902 A, 330.
Mississippian (Burlington); Iowa.

Asteroptychius vetustus St. John and Worth.

Hay, O. P. 1902 A, 330.
Mississippian (Kinderhook); Iowa.

ATOPACANTHUS Hussakof and Bryant. Type *A. dentatus* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 157.
Jordan, D. S. 1923 A, 97.

Atopacanthus dentatus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 19, 158, text-fig. 54*a*.
Upper Devonian (Portage); New York.

Atopacanthus peculiaris (Hussakof).

Hussakof, L. 1913 A, 247, pl. xlvii, figs. 4-6: text-fig. 2 (Apateacanthus).
Hussakof and Bryant 1919 A, 158.
Middle Devonian (Onondaga); New York.

BATACANTHUS St. John and Worth. Type *B. baculiformis* St. John and Worth.

Hay, O. P. 1902 A, 334.
Eastman, C. R. 1902 B, 87.
1903 B, 171.
1917 A, 257 (Syn. of Physonemus).
Jordan, D. S. 1923 A, 93, 106.

Batacanthus baculiformis St. John and Worth.

Hay, O. P. 1902 A, 334.
Eastman, C. R. 1917 A, 263 (Physonemus?).
Mississippian (Keokuk); Iowa, Missouri, Illinois?.

Batacanthus gigas Branson.

Branson, E. B. 1916 A, 656, pl. iv, figs. 3-6; text-fig. 4.
Pennsylvanian (Embar); Wyoming.

Batacanthus? necis St. John and Worth.

Hay, O. P. 1902 A, 334.
Eastman, C. R. 1917 A, 263 (Physonemus?).
Mississippian (Keokuk); Iowa.

Batacanthus stellatus (Newb. and Worth.).

Hay, O. P. 1902 A, 334.
Mississippian (Keokuk); Illinois, Missouri.

BYTHIACANTHUS St. John and Worth. Type *B. vanhornei* St. J. and Worth.

Hay, O. P. 1902 A, 331.
Jordan, D. S. 1923 A, 96.

Bythiacanthus? siderius (Leidy).

Hay, O. P. 1902 A, 331.
Cope, E. D. 1871 R, 440 (Asterocanthus iderius).
Mississippian (St. Louis); Tennessee, New Jersey?

Bythiacanthus vanhornei St. John and Worth.

Hay, O. P. 1902 A, 331.
Mississippian (St. Louis); Illinois.

Bythiacanthus sp. indet.

Cope, E. D. 1871 R, 440 ("Asterocanthus").
New Jersey.

COSMACANTHUS Agassiz. Type *C. malcolmsoni* Agassiz.

Hay, O. P. 1902 A, 330.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 545.
Bronn, H. G. 1848 A, 341.
1849 A, 653.
Evans, H. M. 1904 A, 400.
Jordan, D. S. 1919 C, 225.
1923 A, 96.
Jordan and Hannibal 1923 A, 30.

Cosmacanthus bullatus (St. John and Worth.).

Hay, O. P. 1902 A, 330.
Davidson, P. 1919 A, 435 (Geisacanthus).
Mississippian (Chester); Illinois.

Cosmacanthus elegans Evans.

Evans, H. M. 1904 A, 398, pl. xlvii.
Davidson, P. 1919 A, 434.
Eastman, C. R. 1905 A, 66 ("Asteracanthus").
Lower Triassic; Idaho.

Cosmacanthus humboldtensis Davidson.

Davidson, P. 1919 A, 433, figs. 1, 2.
Jordan and Hannibal 1923 A, 32, 61 (C. humboldtenis).
Middle Triassic; Nevada.

Cosmacanthus stellatus (St. John and Worth.).

Hay, O. P. 1902 A, 330.
Evans, H. M. 1904 A, 400.
Mississippian (St. Louis); Missouri.

CTENACANTHUS Agassiz.

Hay, O. P. 1902 A, 326 (Ctenacanthus); 329 (Eunemacanthus).
Agassiz, L. 1835 B, 342.
1839 A, 597, pl. ii, fig. 10.
1844 C, 268.
Arldt, T. 1907 D, 339.
1923 A, 487.
Barkas, W. J. 1874 B, 168.
1874 D, 545.
Bronn, H. G. 1848 A, 355.
1849 A, 649.
Case, E. C. 1915 A, 124.
Claypole, E. W. 1903 A, 345.
Dean, B. 1902 A, 768.
1909 C, 229, 249, fig. 28 (Ctenacanthus, Ctenacanthidæ).
Eastman, C. R. 1901 A, 795.
1907 B, 75.
1908 A, 152.
1917 A, 261.
Egerton, P. G. 1853 C, 281, pl. xii.
Heilprin, A. 1887 A, 152, 300.
Hussakof, L. 1908 A, 43.
1911 A, 161.
Jordan, D. S. 1923 A, 95, 106.
Mantell, G. A. 1844 A, 611.
Miller, A. M. 1916 A, 72.
Moodie, R. L. 1926 A, 93, pl. vii.
Schlosser, M. 1917 A, 133.
Thomson, J. 1872 A, 66.
Trouessart, E. 1898 B, 7.
Twenhofel and Dunbar 1914 A, 160.
Woodward, A. S. 1915 B, lxix.
1921 B, 32, fig. 2.
1924 A, 112.
Zittel and Koken 1911 A, 53.
Zittel and Schlosser 1923 A, 59, fig. 94.

Ctenacanthus acutus Eastman.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Merrill, G. P. 1907 A, 8.
Mississippian (Keokuk); Iowa.

Ctenacanthus amblyxiphias Cope.

Hay, O. P. 1902 A, 327.
Beede, J. W. 1907 A, 120.
Branson, E. B. 1916 A, 654, pl. ii, fig. 25; text-fig. 5.
Case, E. C. 1915 A, 96.
Eastman, C. R. 1903 B, 186, pl. ii, figs. 22, 23.
Hussakof, L. 1908 A, 44.
1911 A, 161, pl. xxx, fig. 6.
Woodruff, E. G. 1906 A, 290, pl. xviii, fig. 5.
Pennsylvanian (Atchison) Nebraska: (Embar); Wyoming: Permian (Wichita, Clear Fork); Texas.

Ctenacanthus angulatus Newb. and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Chester); Illinois.

Type *C. major* Agassiz.

Ctenacanthus angustus Newb.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1907 B, 18.
Hussakof, L. 1908 A, 44, fig. 19.
Upper Devonian (Berea); Ohio.

Ctenacanthus bellus Branson.

Branson, E. B. 1906 A, 1393, pl. xlii, figs. 19-21.
Mississippian (Salem); Indiana.

Ctenacanthus brevis.

Eastman, C. R. 1902 B, 77. (No description.)
Mississippian (Kinderhook); Iowa.

Ctenacanthus browni Branson.

Branson, E. B. 1916 A, 653, pl. iv, fig. 7; text-fig. 6.
Pennsylvanian (Embar); Wyoming.

Ctenacanthus? burlingtonensis St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92 (This genus?).
1917 A, 262 (This genus?).
Mississippian (Burlington): Iowa, Illinois.

Ctenacanthus buttersi St. John and Worth.

Hay, O. P. 1902 A, 327.
Pennsylvanian; Illinois.

Ctenacanthus cannaliratus St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Chester); Illinois.

Ctenacanthus chemungensis Claypole.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1907 B, 21, 77, pl. vii, fig. 3.
1908 A, 154, 287.
Upper Devonian (Chemung); Pennsylvania, New York.

Ctenacanthus clarkii Newb.

Hay, O. P. 1902 A, 327.
Claypole, E. W. 1903 A, 319 (C. clarki).
Dean, B. 1909 C, 250, figs. 42-45 (C. clarki).
Eastman, C. R. 1902 B, 77 (C. clarki).
1907 B, 18 (C. clarki).
1908 A, 283 (C. clarki).
Hussakof, L. 1908 A, 45, fig. 19.
Upper Devonian (Cleveland); Ohio.

Ctenacanthus compressus Newb.

Hay, O. P. 1902 A, 327.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Hussakof, L. 1908 A, 45.
Upper Devonian (Cleveland); Ohio.

Ctenacanthus costatus Newb. and Worth.

Hay, O. P. 1902 A, 329 (Eunemacanthus).
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (St. Louis); Missouri.

Ctenacanthus coxianus St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 87, 91.
1917 A, 262.
Mississippian (Kinderhook and Keokuk); Iowa.

Ctenacanthus cylindricus Newb.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Hussakof, L. 1908 A, 45.
Newberry, J. S. 1889 A, 202, pl. xxvi, fig. 1.
Mississippian (Keokuk); Kentucky.

Ctenacanthus decussatus Eastman.

Eastman, C. R. 1902 B, 84, 91, pl. vi, fig. 2; text-fig. 11.
Eastman, C. R. 1917 A, 261, 262.
Merrill, G. P. 1907 A, 8.
Mississippian (Kinderhook); Keokuk, Iowa.

Ctenacanthus deflexus St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 77, 83, 92.
1917 A, 262.
Mississippian (St. Louis); Illinois.

Ctenacanthus depressus Newb.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 91
1917 A, 262.
Mississippian (Kinderhook); Iowa.

Ctenacanthus elegans Tuomey.

Hay, O. P. 1902 A, 327.
Mississippian; Alabama.

Ctenacanthus excavatus St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Keokuk); Illinois, Missouri.

Ctenacanthus? fallax Woodward.

Hay, O. P. 1902 A, 327.
Mississippian; ——.

Ctenacanthus formosus Newb.

Hay, O. P. 1902 A, 327.
Newberry, J. S. 1874 G, 94, 98.
1874 H, 212.
Read, M. C. 1873 A, 504 (Ctenocanthus formosa).
Rogers, A. F. 1924 A, 546.
Mississippian (Waverly); Ohio, Kentucky.

Ctenacanthus furcicarinatus Newb.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 87.
Newberry, J. S. 1874 G, 94.
Mississippian (Waverly); Kentucky.

Ctenacanthus gemmatus St. John and Worth.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (St. Louis); Illinois.

Ctenacanthus gracillimus Newb. and Worth.

Hay, O. P. 1902 A, 329 (Acondylacanthus).
Eastman, C. R. 1902 B, 85, 86, fig. 12.
1917 A, 261, pl. v, fig. 4; pl. vii, fig. 7
Hussakof, L. 1908 A, 43 (Acondylacanthus).
Strong, E. A. 1872 A, 2.
Mississippian (St. Louis); Missouri, Michigan, Illinois, Indiana.

Ctenacanthus gradocostus St. John and Worth.

Hay, O. P. 1902 A, 327 (C. gradocostatus. *errore*).
Eastman, C. R. 1902 B, 92.
1917 A, 262 (C. gradocostatus, *errore*).
Mississippian (Burlington); Illinois, Iowa.

Ctenacanthus gurleyi Newb.

Hay, O. P. 1902 A, 327.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (St. Louis); Indiana.

Ctenacanthus harrisoni St. John and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (St. Louis); Illinois.

Ctenacanthus keokuk St. John and Worth.

Hay, O. P. 1902 A, 328.
Branson, E. B. 1906 A, 1393.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Keokuk); Illinois, Missouri.

Ctenacanthus littoni Newb.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Hussakof, L. 1908 A, 45.
Mississippian (St. Louis); Missouri.

Ctenacanthus longinodosus Eastman.

Eastman, C. R. 1902 B, 78, 91, pl. v, fig. 2; text-fig. 8.
Eastman, C. R. 1917 A, 261, 262.
Merrill, G. P. 1907 A, 8.
Mississippian (Kinderhook); Iowa.

Ctenacanthus lucasi Eastman.

Eastman, C. R. 1902 B, 80, 91, pl. vi, fig. 1; text-fig. 9.
Eastman, C. R. 1917 A, 261, 262.
Merrill, G. P. 1907 A, 8.
Mississippian (Kinderhook); Iowa.

Ctenacanthus marshi Newb.

Newberry, J. S. 1873 A, 326, pl. xxxvi, figs. 3, 3b.
Hay, O. P. 1902 A, 328.
Stevenson, J. J. 1907 A, 168 (Ctenobranchus).
Pennsylvanian; Illinois.

Ctenacanthus mayi Newb. and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 91.
Mississippian (Burlington); Iowa.

Ctenacanthus nodocostatus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 159, pl. li, fig. 1.
Devonian (Hamilton, Catskill); New York, Pennsylvania.

Ctenacanthus obscuracostatus Branson.

Branson, E. B. 1916 A, 654, pl. iv, fig. 2; text-figs. 2, 3.
Pennsylvanian (Embar); Wyoming.

Ctenacanthus pellensis St. John and Worth.

Hay, O. P. 1902 A, 328.
Branson, E. B. 1906 A, 1393, pl. xli, fig. 25 (This species?).
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (St. Louis); Iowa: (Salem); Indiana.

Ctenacanthus pugiunculus St. John and Worth.

Hay, O. P. 1902 A, 328.
Mississippian (St. Louis); Missouri, Illinois.

Ctenacanthus randalli Newb.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1907 B, 21, 77.
1908 A, 154, 287.
Hussakof, L. 1908 A, 46, fig. 20.
Upper Devonian (Chemung); Pennsylvania.

Ctenacanthus sculptus St. John and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Kinderhook); Iowa.

Ctenacanthus semicostatus (St. John and Worth.).

Hay, O. P. 1902 A, 328 (Anaclitacanthus).
Eastman, C. R. 1902 B, 89, 92.
1917 A, 262.
Mississippian (Burlington, Kinderhook); Iowa.

Ctenacanthus similis St. John and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 92.
1917 A, 262.
Mississippian (Chester); Illinois.

Ctenacanthus solidus Eastman.

Eastman, C. R. 1902 B, 77, 83, 87, 90, 92, pl. vii, fig. 3; text-fig. 13.
Eastman, C. R. 1917 A, 261, 262.
Merrill, G. P. 1907 A, 8, 9.
Mississippian (Kinderhook); Iowa, Illinois.

Ctenacanthus speciosus St. John and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 89.
Mississippian (Kinderhook); Iowa.

Ctenacanthus spectabilis St. John and Worth.

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 77, 83, 87, 90, 92, pl. v, fig. 1.
1917 A, 261, 262.
Merrill, G. P. 1907 A, 9.
Mississippian (Kinderhook); Iowa, Illinois.

Ctenacanthus triangularis Newb.

Hay, O. P. 1902 A, 328.
Carll, John F. 1880 A, 33.
Newberry, J. S. 1874 G, 90, 98.
Mississippian (Waverly); Pennsylvania.

Ctenacanthus varians St. John and Worth.

St. John and Worthen 1875 A, 422, pl. xiv, fig. 2.
Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 77, 83, 88, 89, 91, 92.
1917 A, 262.
Hay, O. P. 1909 C, 51, pl. xiii, figs. 4, 5.
Mississippian (Kinderhook); Iowa.

Ctenacanthus venustus Eastman.

Eastman, C. R. 1902 B, 81, 92, pl. iii, fig. 2; text-fig. 10.
Eastman, C. R. 1917 A, 261, 262.
Merrill, G. P. 1907 A, 9.
Mississippian (Kinderhook); Iowa.

Ctenacanthus vetustus Newb.

Hay, O. P. 1902 A, 328.
Claypole, E. W. 1903 A, 318.
Eastman, C. R. 1907 B, 18.
1908 A, 283.

Hussakof, L. 1908 A, 46.
Newberry, J. S. 1874 G, 94.
1874 H, 215.
Upper Devonian (Cleveland); Ohio.

Ctenacanthus wrighti Newb.

Hay, O. P. 1902 A, 328.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1902 B, 71.
1907 B, 14, 76.
1908 A, 153, 276.
Hussakof, L. 1908 A, 46.
Hussakof and Bryant 1919 A, 15, 17, 161, pl. lii, fig. 2.
Middle Devonian (Hamilton): Upper Devonian (Genesee); New York.

Ctenacanthus xiphias (St. John and Worth.).

Hay, O. P. 1902 A, 328.
Eastman, C. R. 1902 B, 77 (Acondylacanthus); 92 (Ctenacanthus).
1917 A, 262.
Merrill, G. P. 1907 A, 9.
Trouessart, E. 1898 B, 7.
Mississippian (Keokuk); Iowa.

Ctenacanthus sp. indet.

Eastman, C. R. 1902 B, 83. Mississippian (Keokuk); Iowa.
Hussakof and Bryant 1919 A, 15, 161. Upper Devonian (Genesee); New York.
Twenhofel and Dunbar 1914 A, 160. Pennsylvanian; Kansas.

CYRTACANTHUS Newb. Type *C. dentatus* Newb.

Hay, O. P. 1902 A, 336.
Claypole, E. W. 1903 A, 345.
Eastman, C. R. 1908 A, 119.
1908 B, 193.
Hussakof and Bryant 1919 A, 163.
Jordan, D. S. 1919 B, 371 (Syn.? of Erismacanthus).
1923 A, 107.
Weller, S. 1902 A, 427.

Cyrtacanthus dentatus Newb.

Hay, O. P. 1902 A, 336.
Claypole, E. W. 1903 A, 318.
Eastman, C. R. 1907 B, 13.
1908 A, 149, 278.
Hussakof, L. 1908 A, 46.
Hussakof and Bryant 1919 A, 162, text-fig. 55 *a* (This species?).
Orton, E. 1878 A, 626.
Stauffer, C. R. 1909 A, 169.
Middle Devonian (Columbus and Delaware?); Ohio.

ECZEMATOLEPIS S. A. Miller. Type *Acantholepis pustulosus* (Newb.).

Hay, O. P. 1902 A, 332 (Eczematolepis, Phlyctænacanthus).
Arldt, T. 1907 D, 130, 185 (Acantholepis).
Claypole, E. W. 1903 A, 313 (Acantholepis).
Cleland, H. F. 1911 A, 152 (Phlyctænacanthus).
Dean, B. 1906 B, 136 (Phlyctænacanthus).
Eastman, C. R. 1903 B, 214 (Phlyctænacanthus).
1907 B, 79, 225 (Acantholepis); 80 (Phlyctænacanthus).
1908 A, 140 (Acantholepis); 141, 143 (Phlyctænacanthus).
1908 B, 78, 193 (Acantholepis).
Hussakof, L. 1908 C, 312 (Acantholepis).
Jordan, D. S. 1923 A, 97 (Eczematolepis, Phlyctænacanthus).
Teller, E. F. 1906 A, 162 (Phlyctænacanthus).
Weller, S. 1902 A, 427 (Acantholepis).

Eczematolepis fragilis (Newb.).

Hay, O. P. 1902 A, 332.
Claypole, E. W. 1896 B, 354 (Acantholepis).
1903 A, 321 (Acantholepis). 318 (Oracanthus abbreviatus, O. fragilis, O. granulatus).
Cleland, H. F. 1911 A, 152, pl. xlv, fig. 3 (Acantholepis).
Eastman, C. R. 1907 B, 14, 15, 79, 225, pl. iii, fig. 1 (Acantholepis).
1908 A, 142, 277, pl. iii, fig. 5 (Acantholepis).
1908 B, 79, pl. iii, fig. 1 (Acantholepis).
Hussakof, L. 1908 A, 22, fig. 1.
Hussakof and Bryant 1919 A, 10, 13, 17, 101, pl. xxix, fig. 2, pl. xxx, fig. 1.
Newberry, J. S. 1874 H, 192 (Acantholepis pustulosus).
Orton, E. 1878 A, 626 (Acantholepis pustulosus).
Stauffer, C. R. 1909 A, 169 (Acantholepis).
Middle Devonian (Columbus, Delaware); Ohio: (Ulsterian); New York: (Erian); Wisconsin: Upper Devonian (Genesee); New York.

Eczematolepis telleri Eastman.

Hay, O. P. 1902 A, 332 (Phlyctænaspis).
Cleland, H. F. 1911 A, 153, pls. li, lii, fig. 1 (Phlyctænaspis).
Eastman, C. R. 1907 B, 15, 80 (Phlyctænaspis).
1908 A, 143, 277 (Phlyctænaspis).
Hussakof and Bryant 1919 A, 102.
Sauvage, H. E. 1899 A, 6 (Phlyctænaspis telluri).
Teller, E. E. 1906 A, 162, pls. i-v (Phlyctænaspis).
1911 A, 271.
Middle Devonian (Hamilton); Wisconsin.

ERISMACANTHUS M'Coy. Type *E. jonesii* M'Coy.

Hay, O. P. 1902 A, 335.
Barkas, W. J. 1874 D, 546.
Eastman, C. R. 1902 E, 849.
1903 B, 211.
1917 A, 265.
Hussakof and Bryant 1919 A, 163.
Jordan, D. S. 1923 A, 106.

Erismacanthus barbatus Eastman.

Eastman, C. R. 1903 B, 211, pl. v, fig. 47.
1908 A, 149.
Mississippian (Kinderhook); Iowa.

Erismacanthus formosus Eastman.

Eastman, C. R. 1902 E, 850, fig. 1.
1903 B, 212, fig. 13.
1917 A, 265.
Mississippian (St. Louis); Missouri.

Erismacanthus maccoyanus St. John and Worth.

Hay, O. P. 1902 A, 335.
Davis, J. W. 1884 A, 617.
Eastman, C. R. 1903 B, 211.
1917 A, 265, pl. vii, figs. 2, 3.
Mississippian (Kinderhook); Iowa: (St. Louis); Missouri.

EUCTENIUS Traquair. Type *E. unilateralis* (Barkas).

Hay, O. P. 1902 A, 337.
Jordan, D. S. 1923 A, 96, 107.

Euctenius sp. indet.

Hay, O. P. 1902 A, 337. Pennsylvanian; Ohio.

EUNEMACANTHUS St. John and Worth. Type *E. costatus* (Newb. and Worth.).

Hay, O. P. 1902 A, 329.
Jordan, D. S. 1920 C, 425 (Syn. of Ctenacanthus).
1923 A, 96.

Eunemacanthus costatus (Newb. and Worth.).

Hay, O. P. 1902 A, 329.
Eastman, C. R. 1902 B, 77.
Pennsylvanian (St. Louis); Illinois, Missouri.

Eunemacanthus keytei Branson.

Branson, E. B. 1916 A, 655, pl. iv, fig. 1; text-fig. 1.
Pennsylvanian (Embar); Wyoming.

GAMPHACANTHUS S. A. Miller. Type *Heteracanthus politus* Newb.

Hay, O. P. 1902 A, 332.
Dean, B. 1906 B, 136 (Heteracanthus).
Eastman, C. R. 1907 B, 82, 229 (Heteracanthus).
1908 A, 138 (Syn. of Heteracanthus).
1917 A, 244 (Heteracanthus).
Hussakof and Bryant 1919 A, 163.
Jordan, D. S. 1923 A, 93.
Osburn, R. C. 1907 A, 432 (Heteracanthus).
Zittel and Schlosser 1923 A, 78, fig. 134.

Gamphacanthus politus (Newb.).

Hay, O. P. 1902 A, 332.
Cleland, H. F. 1911 A, 153, pl. xlvii, figs. 1, 2 (Heteracanthus).
Eastman, C. R. 1907 B, 15, 16, 82, 229 (Heteracanthus).
1908 A, 138, 277, 281 (Heteracanthus).
Hussakof, L. 1908 A, 47.
Hussakof and Bryant 1919 A, 164.
Norton, W. H. 1906 A, 356 (Heteracanthus).
Teller, E. E. 1906 A, 164 (Heteracanthus).
1911 A, 270.
Middle Devonian (Hamilton, Cedar Valley); Iowa, Illinois, Wisconsin.

Gamphacanthus uddeni (Lindahl).

Hay, O. P. 1902 A, 332.
Anonymous, 1898 C, 85 (Heteracanthus).
Cleland, H. F. 1911 A, 154 (Heteracanthus).
Eastman, C. R. 1907 B, 15, 16, 83 (Heteracanthus).
1908 A, 139, 277 (Heteracanthus).
1917 A, 245, pl. i (Heteracanthus).
Hussakof and Bryant 1919 A, 164, pl. lii, fig. 1.
Udden, J. A. 1897 A, 95 (Heteracanthus).
Middle Devonian (Cedar Valley); Iowa: (Hamilton); Wisconsin.

GAMPSACANTHUS St. John and Worth. Type *G. typus* St. John and Worth.

Hay, O. P. 1902 A, 336.
Eastman, C. R. 1902 E, 849.
1917 A, 265.
Jordan, D. S. 1923 A, 106.

Gampsacanthus? latus St. John and Worth.

Hay, O. P. 1902 A, 336.
Mississippian (Keokuk); Missouri.

Gampsacanthus squamosus St. John and Worth.

Hay, O. P. 1902 A, 336.
Mississippian (St. Louis); Illinois.

Gampsacanthus typus St. John and Worth.

Hay, O. P. 1902 A, 336.
Zittel and Woodward 1902 A, 49.
Mississippian (St. Louis); Illinois, Missouri.

GLYMMATACANTHUS St. John and Worth. Type *G. irishii* St. J. and Worth.

Hay, O. P. 1902 A, 331.
Evans, H. M. 1904 A, 400.
Jordan, D. S. 1920 C, 425 (Gymnatacanthus).
1923 A, 96.

Glymmatacanthus irishii St. John and Worth.

Hay, O. P. 1902 A, 331.
Mississippian (Kinderhook); Iowa.

Glymmatacanthus petrodoides St. John and Worth.

Hay, O. P. 1902 A, 331.
Mississippian (Chester); Illinois.

Glymmatacanthus rudis St. John and Worth.

Hay, O. P. 1902 A, 331.
Mississippian (Keokuk); Iowa.

HARPACANTHUS Traquair. Type *Tristychius fimbriatus* (Stock).

Hay, O. P. 1902 A, 336.
Bronn, H. G. 1849 A, 653 (Tristychius).
Eastman, C. R. 1908 A, 119, 150.
1917 A, 266.
Jordan, D. S. 1923 A, 106.
Traquair, R. H. 1893 E, 178.
1894 B, 372.
Woodward, A. S. 1924 A, 112 (Tristychius).
Zittel and Koken 1911 A, 54 (Tristychius).
Zittel and Schlosser 1923 A, 59, fig. 95 (Trystichus).

Harpacanthus fimbriatus (Stock).

Hay, O. P. 1902 A, 336.
Hussakof, L. 1908 A, 48.
Mississippian (St. Louis); Illinois.

Harpacanthus procumbens Eastman.

Eastman, C. R. 1917 A, 266, pl. vii, fig. 1.
Mississippian (St. Louis); Missouri.

HOMACANTHUS Agassiz. Type *H. arcuatus* Agassiz.

Hay, O. P. 1902 A, 329.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 546.
Eastman, C. R. 1903 B, 217.
1907 B, 74.
1908 A, 151.
Jordan, D. S. 1923 A, 91.

Homacanthus acinaciformis Eastman.

Eastman, C. R. 1903 B, 218, pl. v, fig. 58.
Eastman, C. R. 1907 B, 21, 75, pl. i, fig. 16.
1908 A, 151, 287, pl. iii, fig. 10.
Upper Devonian (Chemung); Pennsylvania.

Homacanthus delicatulus Eastman.

Eastman, C. R. 1903 B, 218, pl. iii, fig. 28, pl. v, fig. 59.
Eastman, C. R. 1908 A, 152.
Mississippian (Kinderhook); Iowa.

Homacanthus gracilis Whiteaves.

Hay, O. P. 1902 A, 329.
Eastman, C. R. 1907 B, 13.
1908 A, 276.
Lambe, L. M. 1904 C, 33 ("acanthodian fish").
Whiteaves, J. F. 1907 B, 258 ("acanthodian?").
Lower Devonian; New Brunswick.

HOPLONCHUS J. W. Davis. Type *H. elegans* J. W. Davis.

Hay, O. P. 1902 A, 329.
Cushing, H. P. 1912 A, 581.
Jordan, D. S. 1923 A, 96.

Hoplonchus parvulus Newb.

Hay, O. P. 1902 A, 329.

Claypole, E. W. 1903 A, 318 (Ctenacanthus).
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Hussakof, L. 1908 A, 49.
Upper Devonian (Cleveland); Ohio.

LECRACANTHUS St. John and Worth. Type *L. unguiculus* St. John and Worth.

Hay, O. P. 1902 A, 336.
Eastman, C. R. 1902 E, 849.
1917 A, 265.
Jordan, D. S. 1923 A, 106.

Lecracanthus unguiculus St. John and Worth.

Hay, O. P. 1902 A, 336.
Mississippian (St. Louis); Missouri, Illinois.

LISTRACANTHUS Newb. and Worth. Type *L. hystrix* Newb. and Worth.

Hay, O. P. 1902 A, 336.
Barkas, W. J. 1874 D, 547.
Bolton, H. 1896 A, 424, fig.
Jordan, D. S. 1923 A, 107.
Woodward, A. S. 1903 A, 486.

Listracanthus hildrethi Newb.

Hay, O. P. 1902 A, 336.
Pennsylvanian; Ohio.

Listracanthus hystrix Newb. and Worth.

Hay, O. P. 1902 A, 336.
Brongniart, C. 1888 C, 47.
Savage, T. E. 1922 A, 238, 240.
Pennsylvanian; Ohio, Illinois, Missouri.

MACHÆRACANTHUS Newb. Type *M. peracutus* Newb.

Hay, O. P. 1902 A, 331.
Barkas, W. J. 1874 D, 547 (Machæracanthus).
Claypole, E. W. 1903 A, 313.
Eastman, C. R. 1899 A, 642.
1902 B, 92.
1902 G, 536.
1907 B, 83, 193, 231.
1908 A, 112, 113.
Hussakof and Bryant 1919 A, 140, 143.
Jordan, D. S. 1923 A, 91.
Reis, O. M. 1894 A, 58, 60.
Smith, B. 1910 A, 656; fig. 1.
Traquair, R. H. 1893 E, 177.
Weller, S. 1902 A, 427.
Zittel and Koken. 1911 A, 72.

Machæracanthus longævus Eastman.

Eastman, C. R. 1907 B, 14, 85; pl. ii, fig. 8.
Cleland, H. F. 1911 A, 154 (This species?).
Eastman, C. R. 1907 A, 114, 231, 278.
Hussakof and Bryant 1919 A, 17, 166.
Smith, B. 1910 A, 658.
Middle Devonian (Hamilton); New York, Wisconsin?

Machæracanthus major Newb.

Hay, O. P. 1902 A, 331.
Claypole, E. W. 1903 A, 318, 345.
Eastman, C. R. 1907 B, 14.
1908 A, 278.
Hussakof, L. 1908 A, 49.
Hussakof and Bryant 10, 165, pl. liii, figs. 1, 2; text-fig. 56.
Newberry, J. S. 1874 H, 192.
Orton, E. 1878 A, 626.
Smith, B. 1910 A, 658.
Stauffer, C. R. 1909 A, 169.
Zittel and Woodward 1902 A, 49, fig. 97.
Middle Devonian (Columbus and Delaware), Ohio: (Hamilton); New York: Upper Devonian (Genesee); New York.

Machæracanthus peracutus Newb.

Hay, O. P. 1902 A, 332.
Clarke and Luther 1904 A, 42.
Claypole, E. W. 1903 A, 318.
Eastman, C. R. 1907 B, 14, 84.
1908 A, 114, 277.
Hussakof, L. 1908 A, 49.
Hussakof and Bryant 1919 A, 17, 167, pl. liii, fig. 3.
Lambe, L. M. 1904 C, 16, 34, 42.
Newberry, J. S. 1874 H, 192.
Orton, E. 1878 A, 626.
Rogers, A. F. 1924 A, 546.
Smith, B. 1910 A, 658.
Stauffer, C. R. 1909 A, 169.
Whiteaves, J. F. 1877 A, 319.
Lower Devonian; Quebec: Middle Devonian; Ontario: (Columbus and Delaware); Ohio: (Onondaga), New York.

Machæracanthus sulcatus Newb.

Hay, O. P. 1902 A, 332.
Clarke and Luther 1904 A, 42.
Clarke and Ruedemann 1903 A, 767.
Claypole, E. W. 1903 A, 318.
Eastman, C. R. 1907 B, 13, 14, 84, 191, 231; pl. iii, fig. 6.
1908 A, 276, 278.
Lambe, L. M. 1904 C, 16, 34, 42.
Lankester, E. R. 1870 D, 223.
Newberry, J. S. 1874 H, 192.
Orton, E. 1878 A, 626.
Smith, B. 1910 A, 658.
Stauffer, C. R. 1909 A, 169.
Van Ingen and Clark 1903 A, 1204, 1208.
Whiteaves, J. F. 1877 A, 319.
Lower Devonian; Quebec, Ontario: Middle Devonian (Columbus and Delaware); Ohio and Canada: (Onondaga and Oriskany); New York.

Machæracanthus sp. indet.

Eastman, C. R. 1899 A, 642. Middle Devonian (Hamilton); New York.
1907 B, 15 (=M. longaevus?). Middle Devonian (Hamilton); Wisconsin.
Hussakof and Bryant 1919 A, 168, pl. liii, fig. 4. Upper Devonian (Genesee); New York.

MARRACANTHUS St. John and Worth. Type *M. rectus* (Newb. and Worth).

Hay, O. P. 1902 A, 329.
Jordan, D. S. 1923 A, 96.

Marracanthus rectus (Newb. and Worth.).

Hay, O. P. 1902 A, 329.
Mississippian (St. Louis); Missouri.

ŒSTOPHORUS S. A. Miller. Type *Sphenophorus lilleyi* Newb.

Hay, O. P. 1902 A, 337.
Jordan, D. S. 1923 A, 96.
Zittel and Schlosser 1923 A, 31 (Sphenophorus).

Œstophorus lilleyi (Newb.).

Hay, O. P. 1908 A, 337.
Claypole, E. W. 1903 A, 320 (Sphenophorus silleyi).
Eastman, C. R. 1907 B, 21 (Sphenophorus).
1908 A, 207, 288 (Sphenophorus).
1908 B, 157 (Sphenophorus).
Hussakof, L. 1908 A, 23.
Hussakof and Bryant 1919 A, 13, 17, 105, pl. xxxiii, fig. 1 (This species?).
Middle Devonian (Hamilton); Wisconsin: Upper Devonian (Chemung); Pennsylvania: (Genesee); New York.

Œstophorus sp. indet.

Hay, O. P. 1902 A, 338.
Cleland, H. F. 1911 A, 157. Devonian (Hamilton); Wisconsin.

Eastman, C. R. 1907 B, 16 (Sphenophorus). Devonian (Hamilton); Wisconsin.
1908 A, 279 (Sphenophorus).
Teller, E. E. 1911 A, 271 (Sphenophorus). Devonian (Hamilton); Wisconsin.

ONCHUS Agassiz. Type *O. murchisoni* Agassiz.

Hay, O. P. 1902 A, 326.
Agassiz, L. 1835 B, 342.
1839 A, 596, pl. ii, figs. 10, 11.
1839 B, 607, pl. iv, figs. 9-11, 57-59.
1844 C, 268.
Arldt, T. 1923 A, 487.
Barkas, W. J. 1874 D, 547.
Barrell, J. 1915 B, 394, 404.
Bronn, H. G. 1848 B, 843.
1849 A, 652.
Claypole, E. W. 1885 E, 89.
1900 A, 248.
1903 A, 345.
Eastman, C. R. 1907 B, 73.
1908 A, 150.
Hay, O. P. 1901 B, 63.
Heilprin, A. 1887 A, 142, 300.
Jordan, D. S. 1923 A, 92 (To Onchidæ).
Kemna, A. 1903 A, 343.
Lankester, E. R. 1864 C, 446.
Mantell, G. A. 1844 A, 611.
M'Coy, F. 1853 C, 12.
Moodie, R. L. 1923 B, 297.
Murchison, R. I. 1853 A, 16.
1854 A, 238, pl. xxxv, figs. 15-17.
Pompeckj, J. F. 1913 A, 1120.
Schlosser, M. 1917 A, 132.
Stromer, E. 1920 A, 11.
Traquair, R. H. 1899 C, 598.
1900 C, 503.
Woodward, A. S. 1920 D, 27.
Zittel and Koken 1911 A, 72.
Zittel and Schlosser 1923 A, 48, 78, figs. 62, 133.

Onchus clintoni Claypole.

Hay, O. P. 1902 A, 326.
Claypole, E. W. 1885 E, 90.
Dana, J. D. 1896 A, 550.
Eastman, C. R. 1907 B, 12.
Twenhofel, W. H. 1913 A, 303.
Middle Silurian (Clinton); Pennsylvania.

Onchus murchisoni Agassiz.

Agassiz, L. 1843 B (1837), iii, 6, pl. i, fig. 1.
1839 A, 607? pl. iv, figs. 9, 11.
Ami, H. M. 1901 B, 309, 312.
M'Coy, F. 1853 C, 13.
Murchison, R. I. 1853 A, 16.
Woodward, A. S. 1891 A, 94.
1901 C, 312.
1902 D, 203.
Lower Devonian (Knoydart); Nova Scotia.

Onchus pennsylvanicus Claypole.

Hay, O. P. 1902 A, 326.
Claypole, E. W. 1885 E, 90.
Eastman, C. R. 1907 B, 12.
Upper Silurian (Salina); Pennsylvania.

Onchus rectus Eastman.

Hay, O. P. 1902 A, 326.
Clark and Ruedemann 1903 A, 767.
Eastman, C. R. 1907 B, 22, 74; fig. 16.
1908 A, 150, 289, pl. iii, fig. 9.
Hussakof and Bryant 1919 A, 168.
Upper Devonian (Chemung, Catskill); New York.

Onchus sp. indet.

Eastman, C. R. 1907 B, 12. Silurian (Niagara); Maryland.
1908 A, 276. Middle Devonian; Quebec.

PHYSONEMUS M'Coy. Type *P. arcuatus* M'Coy.

Hay, O. P. 1902 A, 333 (Physonemus, Xystracanthus)
Barkas, W. J. 1874 D, 546 (Drepanacanthus); 547 (Physonemus); 548 (Xystracanthus).
Bronn, H. G. 1849 A, 653.
Eastman, C. R. 1902 B, 86, 87; text-fig. 12.
1902 E, 849.
1903 B, 171, 183, 205 (Physonemus, Xystracanthus).
1917 A, 257, 262 (Xystracanthus, Drepanacanthus as syns.).
Hussakof and Bryant 1919 A, 164.
Jordan, D. S. 1919 B, 407.
1923 A, 95, 106 (Physonemus); 106 (Xystracanthus).
Zittel and Koken 1911 A, 63 (Xystracanthus).

Physonemus acinaciformis (St. John and Worth.).

Hay, O. P. 1902 A, 333 (Xystracanthus).
Eastman, C. R. 1903 B, 206, 210.
1917 A, 263.
Pennsylvanian: Illinois.

Physonemus anceps (Newb. and Worth.).

Hay, O. P. 1902 A, 334 (Xystracanthus).
Eastman, C. R. 1903 B, 206 (Drepanacanthus); 210 (Physonemus).
1917 A, 263.
Pennsylvanian; Illinois.

Physonemus arcuatus M'Coy.

M'Coy, F. 1848 A, 117.
Davis, J. W. 1883 A, 367, pl. xlvii, fig. 8.
Eastman, C. R. 1903 B, 208, 210, fig. 12.
1917 A, 263, 264, pl. v, figs. 1, 2.
M'Coy, F. 1855 A, 638, pl. 31, fig. 20.
Woodward, A. S. 1891 A, 130.
This species is not to be confounded with Leidy's *Xystracanthus arcuatus*, now renamed *Physonemus asper* Eastman.
Lower Carboniferous; England, Ireland: Mississippian (St. Louis); Missouri, Illinois, Indiana.

Physonemus asper Eastman.

Eastman, C. R. 1903 B, 183, 210 (To replace *Xystracanthus arcuatus* Leidy, preoccupied).
1917 A, 263.
Hay, O. P. 1902 A, 334 (Xystracanthus arcuatus).
Pennsylvanian; Kansas, Illinois.

Physonemus carinatus St. John and Worth.

Hay, O. P. 1902 A, 333.
Mississippian (Kinderhook); Illinois.

Physonemus chesterensis St. John and Worth.

Hay, O. P. 1902 A, 333.
Mississippian (Chester); Illinois.

Physonemus falcatus St. John and Worth.

Hay, O. P. 1902 A, 333.
Mississippian (St. Louis); Missouri.

Physonemus gemmatus (Newb. and Worth.).

Hay, O. P. 1902 A, 334 (Xystracanthus).
Eastman, C. R. 1903 B, 203, 209, 210.
1917 A, 263, pls. iii, iv; pl. v, fig. 3.
Mississippian (Keokuk); Iowa.

Physonemus gigas Newb. and Worth.

Hay, O. P. 1902 A, 333.
Eastman, C. R. 1902 E, 850.
1903 B, 206, 210, 213.
1917 A, 263.
Mississippian (Burlington); Illinois.

Physonemus hamus-piscatorius Eastman.

Eastman, C. R. 1903 B, 207, 210, pl. v, figs. 45, 46.
Eastman, C. R. 1908 A, 149.
1917 A, 263.
Mississippian (Kinderhook); Iowa.

Physonemus mirabilis (St. John and Worth.).

Hay, O. P. 1902 A, 334 (Xystracanthus).
Eastman, C. R. 1917 A, 263.
Karpinsky, A. P. 1925 A, 135, fig. 15 (Xystracanthus).
Pennsylvanian; Illinois.

Physonemus pandatus Eastman.

Eastman, C. R. 1903 B, 207, 210, pl. v, fig. 44.
Eastman, C. R. 1908 A, 149.
1917 A, 263.
Mississippian (Kinderhook); Iowa.

Physonemus parvulus St. John and Worth.

Hay, O. P. 1902 A, 333.
Mississippian (Keokuk); Missouri, Illinois.

Physonemus proclivus St. John and Worth.

Hay, O. P. 1902 A, 333.
Davis, J. W. 1884 A, 618.
Mississippian (Kinderhook); Iowa.

Physonemus reversus (St. John and Worth.).

Hay, O. P. 1902 A, 334 (Xystracanthus).
Eastman, C. R. 1903 B, 206 (Drepanacanthus).
Mississippian (St. Louis); Illinois, Missouri.

Physonemus stellatus Newb.

Hay, O. P. 1902 A, 333.
Eastman, C. R. 1903 B, 206, 209, 210.
1917 A, 263.
Hussakof, L. 1908 A, 49, fig. 21 (Oracanthus).
Mississippian (Keokuk); Illinois, Iowa: (St. Louis); Indiana.

PROSPIRAXIS Williams. Type *Spiraxis major* Newb.

Hay, O. P. 1902 A, 338.
Jordan, D. S. 1923 A, 96.

Prospiraxis major (Newb.).

Hay, O. P. 1902 A, 338.
Upper Devonian (Chemung); New York.

Prospiraxis randallii (Newb.).

Hay, O. P. 1902 A, 338.
Upper Devonian (Chemung); Pennsylvania.

STETHACANTHUS Newb. Type *S. altonensis* (St. John and Worth).

Hay, O. P. 1902 A, 333.
Clark, W. 1898 A, 46.
Eastman, C. R. 1902 E, 850.
1903 B, 213.
1917 A, 263, 266.
Hussakof and Bryant 1919 A, 164.
Jordan, D. S. 1920 B, 447.
1923 A, 93, 106.

Stethacanthus altonensis (St. John and Worth.).

Hay, O. P. 1902 A, 333.
Eastman, C. R. 1903 B, 214.
Hussakof, L. 1908 A, 50.
Mississippian (St. Louis); Illinois, Missouri.

Stethacanthus compressus Newb.

Hay, O. P. 1902 A, 333.
Mississippian (Burlington); Iowa.

Stethacanthus depressus (St. John and Worth.).

Hay, O. P. 1902 A, 333 (Physonemus).
Eastman, C. R. 1903 B, 216, fig. 15 (Incorrectly referred, *fide* Hussakof and Bryant).

Hussakof, L. 1913 A, 249.
Hussakof and Bryant 1919 A, 170, pl. liv, fig. 3.
Upper Devonian (Catskill); Pennsylvania: Mississippian (Kinderhook); Iowa: (Waverly); Michigan.

Stethacanthus erectus Eastman.

Eastman, C. R. 1903 B, 217, pl. iii, fig. 29.
Hussakof, L. 1913 A, 249.
Mississippian (Kinderhook); Iowa.

Stethacanthus exilis Hussakof.

Hussakof, L. 1913 A, 249, pl. xlvii, fig. 3.
Eastman, C. R. 1917 A, 266.
Mississippian (Waverly); Kentucky.

Stethacanthus humilis Hussakof.

Hussakof, L. 1913 A, 248, pl. xlvii, figs. 1, 2.
Eastman, C. R. 1903 B, 217, pl. iii, fig. 29 (S. depressus).
1917 A, 266.
Hussakof, L. 1913 A, 249, foot-note.
Mississippian (Waverly); Kentucky.

Stethacanthus præcursor Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 169, pl. liv, figs. 1, 2.
Upper Devonian (Genesee); New York.

Stethancanthus productus Newb.

Hay, O. P. 1902 A, 333 (S. productus, S. compressus).
Eastman, C. R. 1903 B, 215, fig. 14 (S. compressus a syn.).
1917 A, 266.
Mississippian (Burlington, Keokuk); Iowa.

Stethacanthus tumidus Newb.

Hay, O. P. 1902 A, 333.
Hussakof, L. 1908 A, 50.
Mississippian (Cuyahoga); Ohio.

Stethacanthus sp. indet.

Eastman, C. R. 1899 A, 642. Mississippian (Keokuk); Iowa.

Class OSTEICHTHYES.

Unless otherwise indicated the writers, as cited, include this group under the term *Pisces*.

Hay, O. P. 1902 A, 338.
Abel, O. 1912 F, 300, 672.
1914 C, 344 ("fische").
1920 A, 333 (Teleostomi).
1921 A, 144, 207, 247 ("fische").
1922 F.
Adams, C. C. 1902 A, 116 ("fish").
Adams, L. A. 1919 A, 62.
Adloff, P. 1904 B, 54 ("fische").
1907 A, 532 ("fische").
Agassiz, A. 1840 C, 97 ("poissons").
1859 A, 108 ("fishes").
1877 A, 117 ("bony fishes").
Agassiz, L. 1836 B, 24 ("poissons").
1840 A, 58 ("poissons").
1840 B, 62 ("poissons").
1844 C, 251 ("poissons").
1844 D, 132 ("fishes").
1858 A, 9 ("fishes").
Ahlborn, F. 1896 B, 1 ("fische").
Aichel, O. 1919 A ("fische").
Allis, E. P. 1919 B, 73.
Anonymous, 1821 A, 272 ("fische").
Alessandrini, A. 1849 A, 371.
Alix, E. 1874 B, 20 ("poissons osseux").
Allen, J. A. 1905 A, 662 ("fishes").
Allis, E. P. 1898 A, 457 ("fishes").
1905 A, 401 ("fishes").
1918 A, 241 ("fishes").
1919 A, 350 ("fishes").
Anthony, R. 1912 A ("poissons").
Arldt, T. 1907 D, 674.
Baraldi, G. 1877 A, *passim* ("pesci").
Bardeleben, K. 1901 A.
1907 A, 35 ("fische").
1907 B, 154 ("fische").
Barkas, W. J. 1874 D, 542 ("fishes").
Barrell, J. 1915 B, 392 ("fishes").
Baur, G. 1885 L ("vertebrates" in part).
Baur, G. 1893 D, 116 ("fische").
1896 F ("osseous fishes").
Bender, O. 1907 A, 39 ("fische").
Berry, E. W. 1925 A, 355 ("fishes").
Beyer, H. 1909 A, 32 ("fische").
Bittner, F. 1912 A, 1 ("fische").
Blainville, H. M. D. 1817 A, 104 ("poissons").
Bojanus, L. H. 1818 A, 498 ("fische").
1818 B, 2095 ("fische").
1821 A, 1157 ("fische").
Bonaparte, C. L. 1831 A, 89 (Ossei).
1832 A, 319.
1833 B, 1197 (Ossei).
Born, G. 1827 A, 182 ("fische").
Boulenger, G. A. 1917 B, 327 ("poissons").
Brandt, J. F. 1865 A, 21.
Bronn, H. G. 1849 A, 780, seq.
Broom, R. 1908 E, 114 ("bony fishes").
Bruch, C. 1862 A, 78 ("fische").
Burckhardt, R. 1903 A, 78 ("fische").
1906 A, 156 ("fische").
Cahall, W. C. 1890 A, 232 ("fishes").
Carus, V. 1875 A, 486.
Carus and Engelmann 1861 A, 968-997, 1551-1562, 1669-1676, 1788.
Chaine, J. 1918 A, 733 ("poissons").
Chamberlin, T. C. 1900 A, 401.
Cleland, J. 1863 A, 119 ("fishes").
1863 B, 308.
1870 A, 120 ("fishes").
Cockerell, T. D. A. 1911 E, 209 ("fish").
1913 B, 119 ("fishes").
1916 B, 187 ("fish").
Collinge, W. E. 1894 A, 499 ("fishes").
1895 B, 274 ("fishes").
Connell, A. 1835 A, 300 ("fishes").
Cope, E. D. 1885 BB, 63.
1891 N, 7, 10.
Coulon, L. 1903 A, 99 ("poissons").
Coyle, R. F. 1909 A, 582 ("fishes").
Cunningham, J. T. 1912 A, 231-440 ("fishes").

Cuvier, G. 1801 A, 25 ("poissons").
1803 A, 166 ("poissons").
1812 A, 123 ("poissons").
1814 A, 73 ("poissons").
1815 A, 102 ("poissons").
Dahl, K. 1909 A, 758 ("fish").
Dana, J. D. 1863 A, 31 ("fishes").
1863 C, 343 ("fishes").
Darton, N. H. 1909 A, 567 ("fish").
Davidoff, M. 1879 A, 450 ("fische").
Dean, B. 1900 A, 22 ("fishes").
1902 C, 702.
1904 C, 437 ("fishes").
1916 A ("fishes").
Dean and Eastman. 1916 A.
1917 A.
Deninger, K. 1914 A, 183-214 ("fische").
1915 A, 181-183 ("fische").
Dependorf, T. 1907 A, 546 ("fische").
Depéret, C. 1907 B ("poissons").
Diener, C. 1909 A, 32 ("fische").
Döderlein, L. 1902 A, 433 ("fische").
Dohrn, A. 1884 A, 140 ("fische").
Dollo, L. 1889 E, 146, 152 ("poissons").
1893 D, 5 ("poissons").
Dugès, A. 1905 A, 107 ("poissons").
1905 B, 798 ("fishes").
Dujardin, F. 1836 A, 319 ("poissons").
Eastman, C. R. 1898 E, 177 ("fishes").
1901 C, 327 ("fishes").
1904 I, 648 ("fishes").
1908 B, 23.
1913 B, 677 ("fishes").
1916 A, 655 ("fishes").
Ebner, V. 1896 A, 123 ("fische").
Eichwald, E. 1832 A, 858 ("fische").
Eimer, G. H. T. 1901 A, 258 ("fische").
Eisler, P. 1895 A, 17 ("fische").
Erdl, M. 1843 A ("fische").
Eschricht, D. F. 1851 A, 110 ("fische").
Fiebiger, J. 1905 A, 140 ("fische").
Filhol, H. 1899 A, 224 ("poissons").
Forster, A. 1905 A, 89-138.
Fraser, C. M. 1915 A, 113.
Frass, E. 1905 B, 354 ("fische").
Frassetto, F. 1915 A ("pesci").
Friedmann, E. 1897 A, 546 ("knochenfische").
Fryd, C. 1901 A, 7.
Fuchs, H. 1907 C, 24 ("fische").
Fulton, T. W. 1906 A, 48 ("fishes").
Fürbringer, M. 1902 A ("fishche").
Gaskell, W. H. 1905 A, 41 ("fishes").
1908 A, 525 ("fishes").
Gaupp, E. 1898 B, 826 ("fische").
1899 A, 1004 ("fische").
1906 A, 31 ("fische").
1906 B ("fische").
1911 C, 455 ("fische").
Gegenbaur, C. 1866 A, 121 ("fische").
1867 A, 55 ("fische").
1867 B, 374 ("fische").
1870 C, 398 ("fische").
Geoffroy-St. Hilaire, E. F. 1807 A, 357 ("poissons").
1807 B, 413 ("poissons").
1807 C, 87 ("poissons").
1807 E, 342 ("poissons").
1817 A, 125 ("poissons").
Geoffroy-St. Hilaire, E. F. 1817 B, 185 ("poissons").
1822 A, 76 ("poissons").
1822 B, 95 ("poissons").
1824 B, 143 ("poissons").
1824 C, 241 ("poissons").
1824 D, 420 ("poissons").
1825 A, 13 ("poissons").
1832 A, 348 ("poissons").
Gervais, P. 1859 A, 511 ("poissons").
Gill, T. 1873 E, 435.
1875 B, 251 ("teleosteous fishes").
1885 B, 29 ("fishes").
1896 A, 696.
1898 A, 696.
1903 A, 255 ("fishes").
1903 B, 488 ("fishes").
1905 A, 655.
1907 A, 491.
1909 A, 193 (Osteophora).
Goette, A. 1901 A, 533 ("fische").
Goodrich, E. S. 1906 A, 333 ("fish").
1909 A, 210 (Osteichthyes).
1910 A, 24 ("fish").
1913 A, 80 ("fishes").
1924 A, 935 (Osteichthyes).
Goodsir, J. 1857 A.
1857 B.
Gregory, W. K. 1910 B, 509 ("fishes").
1923 A, 238 (Osteichthyes).
Gregory and Adams 1915 A, 763 (Osteichthyes).
Gregory and Noble 1924 A, 436 ("fishes").
Green, J. 1858 A, 362 ("fishes").
Gulliver, G. 1896 A, 397 ("osseous fishes").
Haller, G. 1924 A, 305 ("knochenfische").
Hase. A. 1911 B.
1913 A ("fische").
Hasse, C. 1872 A, 417-488.
1873 A, 584-610, pls. xxvii, xxviii ("fische").
Hatschek, B. 1889 A, 82 ("fische").
Hay, O. P. 1897 A, 131 ("fishes").
1917 H, 383 ("fishes").
Heilprin, A. 1887 A, 418 ("fishes").
Hennig, E. 1920 B, 112.
Henshaw, H. W. 1912 A, 318 ("fishes").
Hertwig, O. 1892 A.
Hilgard, T. C. 1857 A, 98 ("fishes").
1859 A, 335 ("fishes").
1860 A, 678 ("fishes").
Hilzheimer, M. 1913 A, 468 ("fische").
Hofer, B. 1890 A, 103 ("fische").
Hollard, H. 1863 A, 38 ("poissons").
1863 B, 633 ("poissons").
1864 A, 5 ("poissons").
1864 B, 241 ("poissons").
1864 C, 359 ("poissons").
Houssay, F. 1909 A, 617 ("poissons").
1909 B, 943 ("poissons").
1909 C, 1076 ("poissons").
Howes, G. B. 1894 A, 78, 87 (Osteichthyes).
Hubbs, C. L. 1919 A, 570.
1919 B, 61 ("fishes").
1926 A, 57 ("fishes").
Hubrecht, A. A. W. 1908 A, 56 (Osteophora).
Huene, F. 1907 A, 151-152 ("fische").
1908 H, 156-175 ("fische").
1910 F, 147-163 ("fische").
1911 G, 146-161 ("fische").
1926 A, 261 ("fische").

Huntsman, A. G. 1919 A, 592.
Huschke, E. 1822 A, 889 ("fische").
Hussakof, L. 1910 A, 925 ("fishes").
Huxley, T. H. 1853 A, 150 ("mackerel").
1859 D, 442 ("fishes").
1859 H, 33, 44 ("fishes").
1863 E, 418.
1863 F, 187, 189 ("bony-fish").
1870 F, 538.
1876 E, 84 ("fishes").
1881 A, 454 ("fishes").
Hyrtl, C. J. 1849 A, 79 ("fische").
1862 A, 95 ("fische").
Ihring, H. 1878 A, 74 ("knochenfische").
1909 A, 287 ("fische").
Jacobshagen, E. 1920 A, 88, 95 ("fische").
Jaekel, O. 1901 B, 52 ("fische").
1903 F, 28, 47.
1906 D, 188.
1909 A, 200.
1909 D, 707 ("fische").
1911 A, 25.
1913 A, 77 ("fische").
1925 A, 165 ("fische").
Jordan, D. S. 1898 A, 173 ("fishes").
1901 A ("fishes").
1902 A, 240 ("fishes").
1904 A, 597 ("bony fishes").
1905 A, 598 (Teleostomi).
1905 B ("fishes").
1919 C, 337 ("fishes").
1922 C, 177 ("fishes").
1923 A ("fishes").
Jordan and Gilbert 1882 A, 73.
Kehrer, F. A. 1896 A, 346 ("fische").
Kemna, A. 1903 A, 340 ("poissons").
Kesteven, H. L. 1922 A, 307 ("fishes").
Keyes, C. 1924 A, 233 ("fishes").
Kingsley, J. S. 1885 A, 90.
1901 A, 197 ("bony fishes").
1925 A, 27, 223, 231 ("fishes").
Klaatsch, H. 1893 B, 649 ("fische").
1893 C, 143 ("fische").
Klein, E. E. 1868 A ("fische").
1884 A ("knochenfische").
1885 A ("knochenfische").
Kner, R. 1860 B, 807 ("fische").
1861 A, 232 ("fische").
Koken, E. 1889 B, 117 ("fische").
1893 B, 640 ("fische").
1898 B, 142 ("fische").
Kolmer, W. 1923 A, 530 ("fische").
Kolzoff, N. K. 1896 A, 514 ("knochenfische").
Köstlin, O. 1844 A, 304 ("knochenfische").
Larger, R. 1913 A ("poisson").
Lavocat, A. 1884 A, 1126 ("poissons").
1885 A, 28 ("poissons").
1888 A, 62 ("poissons").
1889 A, 42 ("poissons").
1896 B, 193 ("poissons").
1897 A, 138 ("poissons").
Le Damany, P. 1902 A, 333 ("poissons").
1903 G, 150, fig. 7 ("poissons").
Ledouble, A. F. 1903 A, 647 ("poissons").
1906 A, 551 ("poissons").
Leidig, F. 1850 A, 170 ("knochenfische").
Lemoine, V. 1889 A, 233 ("poissons").
Leunis and Ludwig 1883 A, 631.
Lönnberg, E. 1901 A.
1902 A.
Lütken, C. F. 1881 A, 1-14; 107-123.
Macdonald, W. 1839 A, 69 ("osseous fishes").
1841 A, 131 ("fishes").
1863 A, 57 ("fishes").
1871 A, 473 ("osseous fishes").
M'Donnell, R. 1864 A, 161 ("fishes").
McMurrich, J. P. 1912 A, 168.
Mandl, L. 1840 A, 338 ("poissons").
Marsh, O. C. 1899 C, 71 ("fishes").
Mayer, A. F. 1862 A, 108 ("fische").
Meckel, J. F. 1825 A ("knochenfische").
Meunier, S. 1903 A, 774 ("poissons").
Mivart, St. G. 1871 B, 378 ("osseous fishes").
Montgomery, T. H. 1901 A, 21733 ("fishes").
Moodie, R. L. 1920 C, 47 ("fishes").
1922 B, 320 ("fishes").
Mutel, —. 1921 A, 522 ("poissons").
Noorden, C. 1883 A, 235 ("knochenfische").
Nusbaum, J. 1908 A, 513 ("knochenfische").
Oken, L. 1818 A, 512 ("fische").
1819 A, 1531 ("fische").
1823 B, 448 ("fische").
Ortman, A. E. 1901 A, 694 ("fishes").
Osborn, H. F. 1916 E, 511 ("fishes").
1917 B, 313 ("fishes").
1926 C, 339 ("fishes").
Osburn, R. C. 1906 B, 585 ("fishes").
Owen, R. 1846 E ("fishes").
1848 B ("osseous fishes").
1868 A, 900.
Paramore, R. H. 1910 A, 1393 ("fishes").
Parker, G. H. 1904 A, 496 ("fishes").
Perrier, E. 1920 A ("poissons").
Pompeckj, J. F. 1914 A, xcii ("fische")
Pouchet, G. 1875 A, 288 ("poissons osseux").
1878 A, 34, 140 ("poissons osseux").
Rauther, M. 1919 A, 215 ("fische").
Regan, C. T. 1906 A, 724.
1909 B, 75.
1924 A, 175 ("fishes").
Reichert, K. B. 1849 A, 494, 508 ("fische").
Reis, O. 1894 B, 87 ("fische").
Retterer, E. 1905 A, 125 ("poissons").
1905 C, 246 ("poissons").
1905 D, 366 ("poissons").
1908 B, 537 ("poissons").
Richardson, J. 1846 A, 199 (Ostinopteri); 329 (Ossei).
Ridewood, W. G. 1896 A, 380 ("fishes").
Ryder, J. 1885 E, 90 ("fishes").
1887 A, 344 (Ichthyes, in part).
Sewertzoff, A. N. 1918 A, 206 ("fishes").
1926 D, 76, 90 (Osteichthyes).
Sabatier, A. 1896 A, 121 ("poissons").
1897 A, 932.
1898 A, 930 ("poissons osseux").
1902 A, 100 ("poissons").
1903 A, 893 ("poissons").
Sagemehl, M. 1883 A ("knochenfische").
Salbey, R. 1868 A, 729 ("fische").
Schlosser, M. 1917 A, 131 ("fische").
Schmalhausen, J. J. 1913 C ("fische").
1917 A, 108 ("fishes").
1923 A, 534 ("fische").
Schubert, R. J. 1906 A, 627 ("fische").
Schuchert and Barrell 1914 A, 25.

Scott, W. B. 1917 A, 176 ("fishes").
Seeley, H. G. 1872 B, 26 ("fish").
Serres, M. 1852 B, 192 ("poissons").
Sewertzoff, A. N. 1896 A, 271 ("fische").
1897 A, 411 ("knochenfische").
1923 A, 408 (Osteichtyes).
1923 B, 145 (Osteichthyes).
1926 A, 508, 526, 537 (Osteicthyes).
1926 B, 579 (Osteichties).
1926 C, 44 (Osteichthyes).
1926 E, 555 (Osteichthyes).
Shann, E. W. 1919 A, 532 (Osteichthyes).
Shepherd, C. A. 1910 A, 418.
Simpson, G. G. 1925 D, 289.
Solger, B. 1880 A, 364 ("knochenfische").
Spencer, W. B. 1886 A, 233.
Springer, F. 1924 A, 233 ("fishes").
Stadtmüller, F. 1926 A, 155 ("knochenfische").
Stannius, H. 1842 C, 97 ("fische").
1849 A, 533 ("knochenfische").
Starks, E. C. 1900 A ("fish").
1905 A, 754 ("fishes").
1908 A, 413 ("fish").
1926 A, 82 ("fishes").
Steenstrup, J. 1861 A, 368 ("poissons").
Steinman, G. 1907 A, 405 (Euichthyes).
1908 A, 205 ("knochenfische").
1912 A, 48 ("fische").
Stephan, P. 1900 A, 281 ("poissons").
Storch, O. 1911 A, 195 ("fische").
Strecker, C. 1887 A, 301 ("knochenfische").
Stromer, E. 1912 A, 15.
1920 A, 18 ("fische").
Sutton, J. B. 1884 A, 570 ("fish").
Swinnerton, H. H. 1911 A, 447 ("fishes").
Taschenberg, O. 1894 A, 3345-3366.
Taylor, H. F. 1916 A, 289 ("fish").
Terra, P. 1911 A, 134, 197.
Terry, R. J. 1909 A, 525 ("fishes").
Thilo, O. 1896 A, 285 ("fische").
1896 B, 96 ("fische").
1897 A, 171 ("fische").
1898 A, 141 ("fische").
1898 B, 81 ("fische").
1900 A, 18 ("fische").
1900 B, 19 ("fische").
Thilo, O. 1903 A, 528 ("fische").
1913 A, 289 ("fische").
Tomes, C. S. 1875 C, 362 ("fish").
1877 A, 44 ("fish").
1900 A, 35 ("osseous fishes").
Traquair, R. H. 1900 C, 502 ("fishes").
Vaillant, L. 1874 A, 406 ("poissons").
Vanhöffen, E. 1891 A, 134 ("fische").
Veit, O. 1916 A, 375 ("fische").
Versluys, J. 1912 A, 501 ("fische").
1925 B, 182 ("knochenfische").
Wagner, R. 1843 A, 204 (Ostacanthi).
Wallace, A. R. 1876 A, i, 494; ii, 575 ("fishes").
Watson, D. M. S. 1917 A, 981 ("fish").
1917 B, 61 ("fishes").
Webb, W. M. 1905 A, 59 ("fishes").
Weber, E. H. 1821 A, 1059.
Weidenreich, F. 1926 A, 46 ("fische").
White, C. 1885 A, 44 ("fishes").
Whitehouse, R. H. 1914 A, 522 ("fishes").
1918 A, 135 ("fishes").
Wiedersheim, R. 1881 B, 326.
1892 A, 43 ("fische").
Wilbrand, J. B. 1824 A, 982 ("fische").
Wilder, B. G. 1865 A, 56 ("fishes").
1872 B ("fishes").
Williamson, W. C. 1851 A, 643 ("fishes").
Winslow, G. M. 1898 A, 186 ("fishes").
Woodward, A. S. 1898 B, 18.
1898 C, 257 ("fishes").
1909 A, 323 ("fishes").
1910 B, 464 ("fishes").
1917 D, lxv ("fishes").
1920 D ("fishes").
1922 C, 53, 61.
Woodward and Sherborn 1891 A, 26.
Woodward, H. 1904 B, 139 ("fishes").
Wright, E. P. 1878 A, 286 ("fishes").
1878 B, 149 ("fishes").
Wyman, J. 1867 B, 264 ("fishes").
Ziegler, H. E. 1901 A ("knochenfische").
1908 A, 721 ("knochenfische").
Zittel, K. A. 1901 A, 409 ("fishes").
Zittel and Koken 1911 A, 3 (Pisces, in part).
Zittel and Schlosser 1923 A, 5 (Pisces, in part).
Zittel and Woodward 1902 A, 2.

Subclass Ostracophora Cope.

Cope, E. D. 1891 G, 646.
Hay, O. P. 1902 A, 339 (Aspidoganoidei).
Abel, O. 1912 F, 206, 476 ("ostracodermen").
Barrell, J. 1915 B, 372 ("ostracoderms").
Berry, E. W. 1925 A, 356 ("ostracoderms").
Bridge, T. W. 1904 A, 149, 522, 749 (Ostracodermi).
Bryant, W. L. 1926 B, 256 ("ostracoderms").
Claypo'e, E. W. 1900 A, 248 ("ostracoderms").
Cope, E. D. 1889 R, 852, 853 (Arrhina).
1891 N, 9.
Cunningham, J. T. 1912 A, 250 ("ostracoderms").
Dean, B. 1900 A, 13 ("ostracoderms"); 22 (Ostracophora).
1901 C, 110, seq. (Ostracophori).
1912 A, 226 ("ostracophores").
Dollo, L. 1903 D, 700 ("ostracodermes").
1910 A, 390 ("ostracodermes").
Eastman, C. R. 1898 E, 183 (Ostracodermi).
1900 G, 287 ("ostracoderms").
1901 D, 329 ("ostracoderms").
1904 C, 141 ("ostracophores").
1905 A, 46 ("ostracophores").
1906 D, 2 (Ostracophori).
1907 B, 23, 24, 232 (Ostracophori).
1908 A, 54, 59, 69 ("ostracophores").
1917 A, 237 (Ostracodermi).
Fraipont, C. 1912 A, 66 ("ostracophores").
Gadow, H. 1910 A, 27 (Ostracodermi).
Gaskell, W. H. 1908 A, 326, 343 (Ostracodermata).
Goodrich, E. S. 1904 A, 493 (Ostracodermi).
1909 A, 194, 407 (Ostracodermi).
Gregory, W. K. 1915 D, 318, 341 (Ostracodermi).
1922 A, 3 ("ostracoderms").
1928 A, 4, fig. 2 ("ostracoderms").
Hussakof, L. 1906 A, 135 (Euostracophora).

Hussakof and Bryant 1919 A, 21 (Euostracophori).
Jaekel, O. 1902 A, 103 ("placodermen" in part).
Jordan, D. S. 1903 A, 135 (Aspidoganoidei, Ostracophora).
1905 A, i, 568; ii, 584 (Ostracophori).
1907 B, 223, 759 (Ostracophori).
1923 A, 84 (Ostracophori).
Kemna, A. 1903 A, 347 ("ostracodermes").
1904 A, 14 ("ostracodermes").
Keyes, C. A. 1922 A, pl. iii (Ostracodermata).
Kiaer, J. 1924 A, *passim* (Ostracodermi).
1928 A, 118 ("ostracoderms").
Kingsley, J. S. 1925 A, 10, 90 (Ostracoderma).
Lankester, E. R. 1897 A, 45 (Ostracodermi).
Moodie, R. L. 1915 I, 138, 140 ("ostracoderms").
1926 A, 75.
1928 A, 348 (Ostracodermi).
Parker and Haswell 1897 A, 243 (Ostracodermi).
Patten, W. 1902 B, 180 ("ostracoderms").
1903 A, 223 ("ostracoderms").
1903 B, 828 ("ostracoderms").
1903 C, 488 ("ostracoderms").
1903 D, 1 ("ostracoderms").
1904 A, 123 ("ostracoderms").
Patten, W. 1905 A, 297 ("ostracoderms").
1905 B, 140 ("ostracoderms").
1912 A, 485 ("ostracoderms").
1925 A, x ("ostracoderms").
1926 A, 237 ("ostracoderms").
Raymond, P. E. 1925 A, 433 ("ostracoderms").
Schmalhausen, J. J. 1913 A, 76 (Ostracodermi.)
Schuchert, C. 1915 A, 686 (Ostracodemi).
Stetson, H. C. 1928 A, 230.
Stromer, E. 1905 H, 216 (Ostracodermi).
1912 A, 36, 48 (Ostracodermi).
1920 A, 11 (Ostracodermi).
Thevenin, A. 1910 A, 35 ("ostracoderms").
Traquair, R. H. 1900 C, 504 (Ostracodermi).
1903 A, 731 (Ostracodermi).
Woodward, A. S. 1897 B, 144 (Ostracodermi).
1906 A, 313 (Ostracodermi).
1906 C, 267 ("ostracoderms").
1910 D, 31 ("ostracoderms").
1915 B, lxiii (Ostracodermi).
1920 D, 26 (Ostracodermi).
1922 C, 53 (Ostracodermi).
Woodward, H. 1904 B, 139 (Ostracodermi).
Zittel and Woodward 1902 A, 50 (Ostracodermi).

Order PTERASPIDOMORPHI Goodrich.

Goodrich, E. S. 1909 A, 195.
Unless otherwise indicated, the authors, as cited, employ the name Heterostraci.
Hay, O. P. 1902 A, 339.
Adams, L. A. 1919 A, 112.
Andreæ, A. 1901 B, 507.
Barrell, J. 1915 B, 402.
Bridge, T. W. 1904 A, 524, 742.
Claypole, E. W. 1900 A, 245.
Cope, E. D. 1891 N, 9.
Dean, B. 1900 A, 22.
1901 C, 113.
Dean, Gudger, Henn 1923 A, 401, 663.
Eastman, C. R. 1903 E, 573.
1907 B, 23, 25, 27, 28.
1908 A, 69, 72.
Goodrich, E. S. 1908 A, 754.
Jaekel, O. 1903 D, 41.
1911 A, 32.
1913 A, 85 ("heterostraken").
Jordan, D. S. 1905 A, i, 573; ii, 574.
1907 B, 759.
1923 A, 85.
Kemna, A. 1903 A, 348, 350, 368.
Kiaer, J. 1924 A, 114, 116, 123 (Heterostraci); 116 (Pteraspidomorphi).
1928 A, 117, 125 ("pteraspids").
Koken, E. 1899 B, 172 (Aspidorhini).
Lankester, E. R. 1868 A, 14, 16.
1870 C, 62.
Osburn, R. C. 1907 B, 173.
Parker and Haswell 1897 A, 243.
Pompeckj, J. F. 1913 A, 1110.
Regan, C. T. 1904 A, 344.
Rohon, J. V. 1902 A, 27 (Aspidorhini).
Rosén, N. 1916 A, 11, 30.
Sauvage, H. E. 1901 C, 66.
Schlosser, M. 1917 A, 132, 133.
Simpson, G. G. 1925 D, 289.
1926 J, 173 ("ostracoderms").
Stetson, H. C. 1928 A, 223.
Stromer, E. 1912 A, 37.
1920 A, 11, 12.
Traquair, R. H. 1899 A, 853.
1899 C, 602.
1900 C, 504.
1903 A, 731.
Woodward, A. S. 1922 C, 54.
Woodward, H. 1878 A, 6.
1904 B, 140.
1920 D, 28.
Zittel and Koken 1911 A, 28.
Zittel and Schlosser 1923 A, 29.
Zittel and Woodward 1902 A, 50.

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Jordan, D. S. 1905 A, II, 573.
Unless otherwise indicated the authors, as quoted, use the names Cœlolepidæ or Cœlolepididæ.
Andreæ, A. 1901 B, 505.
Abel, O. 1919 A, 72.
Barrell, J. 1915 B, 398.
Bryant, W. L. 1926 B, 257.
Dollo, L. 1903 D, 701.
Eastman, C. R. 1901 C, 328.
1907 B, 23, 27, 91.
Eastman, C. R. 1908 A, 55, 69, 160.
Goodrich, E. S. 1909 A, 196.
Jordan, D. S. 1923 A, 85 (Thelodontidæ).
Kemna, A. 1904 A, 12 ("cœlolépidés").
Kiaer, J. 1924 A, 17, 18, 24, 94, 114, 116, 117, 119.
Pander, C. H. 1856 A, 64 ("cœlolepiden").
Pompeckj, J. F. 1913 A, 1111.
Sauvage, H. E. 1901 C, 65.
Schlosser, M. 1917 A, 146 ("cœlolepiden").
Stetson, H. C. 1928 A, 221.

Stromer, E. 1905 D, 314 ("cœlolepiden").
Traquair, R. H. 1899 A, 828, 843.
1899 C, 597.
1903 A, 731.
Woodward, A. S. 1891 A, 157.
Woodward, A. S. 1898 B, 28.
1900 D, 71.
Zittel, Eastman, etc. 1902 A, 50.
Zittel and Koken 1911 A, 28.
Zittel and Schlosser 1923 A, 29.

THELODUS Agassiz. Type *T. parvidens* Agassiz.

Agassiz, L. 1839, Murchison's Silur. Syst., 606, 704, pl. iv, figs. 34-36.
Abel, O. 1919 A, 70, 73, figs. 33, 34.
1920 A, 320, fig. 507.
Adams, L. A. 1919 A, 120.
Andreae, A. 1901 B, 505.
Barrell, J. 1915 B, 394.
Crook, C. V. 1901 A, 119.
Dean, Gudger, Henn 1923 A, 401, 663.
Deecke, W. 1926 A, 185.
Dollo, L. 1910 A, 390.
Eastman, C. R. 1901 C, 328.
1908 A, 55, fig. 1.
Goodrich, E. S. 1908 A, 754, fig. 196.
1909 A, 196, 517, fig. 168.
Hilzheimer, M. 1913 A, 468.
Jaekel, O. 1911 A, 36, fig. 23.
Jordan, D. S. 1919 B, 309 (Syn. of Asterodon).
MacBride, E. W. 1910 A, 18.
M'Coy, F. 1853 C, 14.
1855 A, 576.
Murchison, R. 1853 A, 16.
1854 A, 238.
Pander, C. H. 1856 A, 66, pls. iv, vi (Cœlolepis); 67 (Pachylepis, Thelopis).
Pompeckj, J. F. 1913 A, 1110, figs. 3, 6.
Preobrajensky, J. A. 1911 A, 26 (Cœlolepis, Thelodus).
Powrie, J. 1870 A, 298, pl. xiv, fig. 16 (Cephalopterus).
Roemer, F. 1885, Palaeont. Abhandl., ii, 359, pl. xxxi, figs. 21-25.
Rohon, J. V. 1893 A, 11.
Rosén, N. 1916 A, 12, fig. 5.
Sauvage, H. E. 1901 C, 63 (Thelodus, Cœlolepis)
Smith, B. 1910 A, 656.
Stensiö, E. A. 1927 A, 331.
Stetson, H. C. 1928 A, 221.
Stromer, E. 1912 A, 37, fig. 47.
1920 A, 13.
Traquair, R. H. 1899 A, 829, pl. i (Cœlolepis a syn.).
1899 C, 595, pl.
1900 B, 465.
1900 D, 66.
1903 A, 731.
1905 B, 880, pl. i, text-fig. 1.
Woodward, A. S. 1891 A, 158 (Cœlolepis, Thelodus).
1898 B, 28 (Cœlolepis, Thelodus).
1904 C, 186.
1906 C, 267, fig. 1.
1920 D, 28, fig. 28.
1922 C, 55.
Zittel, Eastman, etc. 1902 A, 51, fig. 99.
Zittel and Koken 1911 A, 29, figs. 33, 34.
Zittel and Schlosser 1923 A, 29, fig. 35.

Thelodus macintoshi Stetson.

Stetson, H. C. 1928 A, 223, figs. 1-6.
Silurian (Niagara?); New Brunswick.

Thelodus sp. indet.

Eastman, C. R. 1907 B, 13. Lower Devonian (Oriskany); Nova Scotia.
1908 A, 72, 266, pl. i, figs. 7, 8, 15; pl. ii, figs. 13, 14 (This genus?). Middle Devonian (Columbus limestone); Ohio.
Stauffer, C. R. 1909 A, 169 (Cœlolepis); 170. Middle Devonian (Columbus); Ohio.

ASTRASPIDÆ Eastman.

Eastman, C. R. 1917 A, 237.
Jordan, D. S. 1923 A, 85.
Zittel and Schlosser 1923 A, 31.

EOICHTHYS Bryant. Type *E. howelli* Bryant.

Bryant, W. L. 1926 A, 236.

Eoichthys howelli Bryant.

Bryant, W. L. 1926 A, 236.
Howell, B. F. 1926 A, 236 ("fish plate?").
Cambrian (St. Albans shale); Vermont. A doubtful fish plate. No description.

ASTRASPIS Walcott. Type *A. desiderata* Walcott.

Hay, O. P. 1902 A, 342.
Clarke, J. M. 1895 A, 121 ("fossil fishes").
Eastman, C. R. 1915 B, 439.
1917 A, 238.
Rogers, A. F. 1924 A, 546.
Schlosser, M. 1917 A, 132 ("spuren von fischen").
Stensiö, E. A. 1927 A, 314.
Stromer, E. 1920 A, 10, 11.
Vaillant, L. 1902 A, 1321 ("poissons").
Walcott, C. D. 1891 A, 245 ("fish").
Woodward, A. S. 1921 A, 179.
Woodward, A. S. 1922 C, 58.
Zittel and Schlosser 1923 A, 32.

Astraspis desiderata Walcott.

Hay, O. P. 1902 A, 342.
Cockerell, T. D. A. 1913 A, 246.
Eastman, C. R. 1907 B, 12.
1908 A, 75.
1917 A, 238, pl. xii, figs. 5, 6.
Jaekel, O. 1892 C, 168 ("fish remains").
1895 D, 162.

Jordan, D. S. 1905 A, i, 578 (Asteraspis).
Merrill, G. P. 1907 A, 7.
Woodward, A. S. 1920 D, 33.
Ordovician (Black River); Colorado.

Astraspis sp. indet.

Cockerell, T. D. A. 1913 A, 246. Ordovician?; Colorado.

PTERASPIDÆ Claypole.

Hay, O. P. 1902 A, 339.
Abel, O. 1919 A, 82.
Allis, E. P. 1905 A, 488.
Andreæ, A. 1901 B, 507.
Arldt, T. 1907 D, 677.
Bridge, T. W. 1904 A, 527.
Bryant, W. L. 1926 B, 256.
Dean, B. 1901 C, 110 ("pteraspids").
Dean, Gudger, Henn 1923 A, 401, 663.
Deecke, W. 1913 A, 87.
Drevermann, F. 1904 A, 285 ("pteraspiden").
Eastman, C. R. 1907 B, 23.
1908 A, 55 ("pteraspidians").
Gebhardt, F. A. M. W. 1907 A, 73 ("pteraspiden").
Goodrich, E. S. 1908 A, 754 ("pteraspids").
1909 A, 198.
Hilzheimer, M. 1913 A, 471.
Howes, G. B. 1902 A, 525 ("pteraspidians").
Jaekel, O. 1902 A, 105 ("pteraspiden").
1906 C, 156 ("pteraspiden").
1906 D, 187 ("cyathaspiden").
1907 A, 186 ("pteraspiden," "cyathaspiden").
1911 A, 33 (Pteraspidi, suborder).
1919 A, 73 ("pteraspiden").
1921 A, 226, 233 ("pteraspiden").
1926 A, 183.
Jordan, D. S. 1905 A, i, 570, 575.
1907 B, 759.
1923 A, 85.
Kemna, A. 1903 A, 347, 350 ("ptéraspidés").
1904 A, 14 ("ptéraspidés").
Kiaer, J. 1924 A, 91, 92, 105, 114, 115, 122.
Koken, E. 1899 B, 172.
Lankester, E. R. 1897 A, 45.
Osborn, H. F. 1902 H, 749 ("pteraspids").
Patten, W. 1902 A, 392.
1903 B, 827, 831.
1912 A, 264, 366 (Pteraspida).
Pompeckj, J. F. 1913 A, 1110, 1113.
Reis, O. M. 1894 A, 64 ("pteraspiden").
Rohon, J. V. 1902 A, 4, 27.
Sauvage, H. E. 1901 C, 66.
Schlosser, M. 1917 A, 132, 133 ("pteraspiden").
Simpson, G. G. 1925 D, 289.
Steinmann, G. 1907 A, 417.
Stensiö, E. A. 1927 A, 315.
Stetson, H. C. 1928 A, 228.
Stromer, E. 1920 A, 16.
Trouessart, E. L. 1906 A, 213.
Woodward, A. S. 1898 B, 5.
1920 D, 29 ("pteraspidians").
Zittel and Koken 1911 A, 30.
Zittel and Schlosser 1923 A, 32.
Zittel and Woodward 1902 B, 52.

PTERASPIS Kner. Type *Cephalaspis lewisii* Agassiz.

Hay, O. P. 1902 A, 339.
Abel, O. 1907 D, (161).
1912 F, 207, 476, 695, fig. 464.
1919 A, 83, figs. 44-47.
1920 A, 322.
Adams, L. A. 1919 A, 121.
Allis, E. P. 1905 A, 488.
Andreæ, A. 1901 B, 507, fig. 3.
Alth, A. 1884 A, 160.
Barkas, W. J. 1874 D, 552.
Bordage, E. 1892 A, 333.
Bridge, T. W. 1904 A, 527, 753.
Bryant, W. L. 1926 B, 256, 258.
Claypole, E. W. 1896 B, 356.
Cunningham, J. T. 1912 A, 250.
Dean, B. 1904 D, 64.
Dean, Gudger, Henn 1923 A, 401, 663.
Dorlodot, H. 1912 A, 21.
1912 B, 64.
Drevermann, F. 1904 A, 275.
Eastman, C. R. 1901 C, 328.
1902 C, 506.
1905 A, 40, fig. 3.
1908 A, 58.
Fraipont, C. 1912 A, 66.
Frech, F. 1897 A, 123.
Gaskell, W. H. 1895 A, 36.
Goodrich, E. S. 1908 A, 754, fig. 196.
1909 A, 195, fig. 166.
Gregory, W. K. 1915 D, 319.
Haeckel, E. 1868 A, 445.
Heilprin, A. 1887 A, 429.
Hussakof, L. 1906 A, 134.
Huxley, T. H. 1858 D, 510, pl. xv.
1861 D, 458.
1861 E, 417, figs. 1, 2.
Jaekel, O. 1902 A, 105.
1903 E, 92.
1911 A, 33, fig. 18.
1919 A, 74.
1927 A, 261, fig. 6.
Jordan, D. S. 1819 B, 232.
Kemna, A. 1903 A, 345, figs. 7, 8.
1904 A, 15, figs. 1-4.
Kiaer, J. 1924 A, 91.
1928 A, 119, pl. xii; text-figs. 1-3.
Kingsley, J. S. 1925 A, 90.
Lankester, E. R. 1864 C, 442.
1864 D, 292.
1865 B, 517.
1868 A, 14, 28, figs. 4, 8.
1897 A, 45.
1905 A, 257, fig. 185.
Leriche, M. 1903 A, 163.
1906 B, 341.
1906 C, 420.
1912 A, 39.
1912 B, 49.
1924 A, 143.
1925 A, 19, figs. 1, 2.
Lütken, C. 1868 C.
Mitchell, H. 1863 A, 31.

Moodie, R. L. 1926 A, 76, 77.
Osborn, H. F. 1905 N, 235.
Patten, W. 1894 A, 435.
1902 A, 379, 389, figs. 1-3.
1902 B, 181, fig. 6.
1903 A, 224.
1903 B, 828, figs. 1-3.
1903 D.
1912 A, 293, 364, figs. 196, 197, 245.
Pompeckj, J. F. 1913 A, 1110, fig. 8.
Powrie, J. 1861 A, 189.
1863 A, 67, fig.
1870 A, 284.
Regan, C. T. 1904 A, 345.
Rohon, J. V. 1902 A.
Schuchert and Levene 1927 A, 266, fig.
Simpson, G. G. 1926 K, 173.
Stensiö, E. A. 1926 A, 1, figs. 1-6.
1927 A, 316.
Stetson, H. C. 1928 A, 228.
Storms, R. 1891 A, 116.
Stromer, E. 1905 D, 314.
1920 A, 14, 15.
Symonds, W. S. 1884 A, 161.
Traquair, R. H. 1900 C, 504.
Trouessart, E. L. 1906 A, 213.
Whiteaves, J. F. 1901 A, 182.
Woodward, A. S. 1898 B, 6, figs. 3-6.
1900 E, 203.
1910 D, 31.
1920 D, 29.
1922 C, 55, figs. 50, 51.
Woodward, H. 1878 A, 7, pl. i, fig. 3.
Zittel and Koken 1911 A, 31.
Zittel and Schlosser 1923 A, 33, figs. 38, 39.
Zittel and Woodward 1902 A, 52.

Pteraspis crouchii Lankester.

Lankester, E. R. 1865 A, 58.
Abel, O. 1919 A, 82, figs. 44-45.
1920 A, 322, fig. 511 (P. crouchi).
Alth, A. 1884 A, 170.
Ami, H. M. 1901 B, 309, 311 (This species?).
Dawson, G. M. 1899 A, 182 (Pteraspis sp.).
Fraipont, C. 1912 A, 69.
Kemna, A. 1904 A, 15, figs. 1-4 (P. crouchi).
Lankester, E. R. 1864 D, 292.
1868 A, 30, pl. iii; pl. iv, fig. 5; pl. vi, figs. 4, 7, 8; pl. vii, figs. 4, 8, 11.
1905 A, 259, figs. 187, 188.
Leriche, M. 1903 A, 161, pls. v, vi, text-figs. 1, 2 (P. crouchi).
1906 C, 413, pl. ii, text-figs. 9-12.
1924 A, 145, pl. iii; text-figs. 2, 3 (P. crouchi).
1925 A, 25.
Stensiö, E. A. 1926 A, 3, figs. 1, 4.
1927 A, 317, fig. 86.
Twenhofel, W. H. 1913 A, 303 (This species?).
Woodward, A. S. 1887 A, 478, fig.
1891 A, 167.
1898 B, 6, fig. 5.
1901 C, 311.
1902 D, 203.
Lower Devonian (Knoydart); Nova Scotia; Europe.

Cyathaspis Lankester. Type *Pteraspis banksii* Huxley and Salter.

Hay, O. P. 1902 A, 340.
Abel, O. 1912 F, 476.
1919 A, 86, fig. 48.
Alth, A. 1884 A, 164.
Arldt, T. 1923 A, 482.
Barkas, W. J. 1874 D, 550.
Bryant, W. L. 1926 B, 256.
Claypole, E. W. 1896 B, 358.
Dean, Gudger, Henn 1923 A, 663.
Eastman, C. R. 1902 C, 506.
1903 E, 575.
1907 B, 30, 228.
Gaskell, W. H. 1908 A, 523.
Goodrich, E. S. 1909 A, 195, fig. 172.
Hussakof, L. 1906 A, 134.
Jaekel, O. 1902 A, 104.
1903 D, 58.
1903 E, 86, fig. 5.
1921 A, 226, 233.
1926 A, 162, 165, 183, fig. 5.
1927 A, 260.
Kemna, A. 1903 A, 351, 355, figs. 4, 5.
1904 A, 24.
Lankester, E. R. 1864 D, 292.
1868 A, 14, 26, fig. 5.
Leriche, M. 1906 B, 341, figs. 1, 2.
1906 C, 414.
Patten, W. 1902 B, 192.
1903 A, 224.
1903 B, 841.
Patten, W. 1903 D, 13.
1912 A, 344, 350.
Pompeckj, J. F. 1913 A, 1110, fig. 4.
Preobrajensky, J. A. 1911 A, 25.
Symonds, W. S. 1884 A, 161.
Traquair, R. H. 1900 C, 504.
Woodward, A. S. 1910 D, 31.
1920 D, 29.
1922 C, 55, fig. 49.
Woodward, H. 1878 A, 8, fig. 4.
Zittel and Koken 1911 A, 32.
Zittel and Schlosser 1923 A, 33, fig. 40.
Zittel and Woodward 1902 A, 53.

Cyathaspis acadica (Matthew).

Hay, O. P. 1902 A, 340.
Dana, J. D. 1896 A, 546 (Diplaspis).
Eastman, C. R. 1907 B, 12.
1908 A, 72.
Kiaer, J. 1924 A, 124.
Lambe, L. M. 1904 C, 14, 15, 33, 40.
1912 A, 3 (Diplaspis).
Matthew, G. F. 1907 A, 9 (Diplaspis).
Moodie, R. L. 1926 A, 67 (Coccosteus).
Silurian (Niagara?); New Brunswick.

Cyathaspis vaningeni Bryant.

Bryant, W. L. 1926 B, 269, pl. ii, fig. 1; pl. iv, fig. 2.
Silurian (Salina or Medina); New York.

Cyathaspis wardelli (Ruedemann).

Ruedemann, R. 1916, Bull. N. Y. State Mus., No. 189, 102, pl. xxxii, figs. 1-12; text-figs. 2, 3 (Anatifopsis).

Bryant, W. L. 1926 B, 266, pl. i, fig. 2; pl. ii, figs. 5, 6; pl. iv, fig. 1.

Silurian (Salina or Medina); New York.

PALÆASPIS Claypole. Type *P. americana* Claypole.

Hay, O. P. 1902 A, 340.
Arldt, T. 1923 A, 482 (Holaspis).
Bryant, W. L. 1926 B, 256, 258.
Claypole, E. W. 1896 B, 358.
1900 A, 248.
1903 A, 335.
Dean, Gudger, Henn 1923 A, 663.
Eastman, C. R. 1917 A, 239.
Frech, F. 1897 A, 123.
Goodrich, E. S. 1909 A, 199, fig. 170.
Jaekel, O. 1894 D, 466.
1919 A, 73, fig. 1 ("palæaspiden").
1925 A, 165 ("palæaspiden").
1928 A, 43 ("palæaspiden").
Kemna, A. 1903 A, 345.
Kiaer, J. 1924 A, 91.
Leriche, M. 1926 A, 18, pls. i, ii.
Osborn, H. F. 1916 E, 603, fig. 11.
1917 B, 165, fig.
Sewertzoff, A. N. 1926 C, 44 ("palæaspiden").
Simpson, G. G. 1926 K, 173.
Stensiö, E. A. 1926 A, 1.
1927 A, 316, 326.
Traquair, R. H. 1900 C, 504.
Zittel and Koken 1911 A, 32.
Zittel and Schlosser 1923 A, 33.
Zittel and Woodward 1902 A, 53.

Palæaspis americana Claypole.

Hay, O. P. 1902 A, 340 (P. americana, P. elliptica).
Bryant, W. L. 1926 B, 261, pl. i; pl. ii, fig. 1.
Chamberlin, T. C. 1900 A, 402 (Pteraspis).
Claypole, E. W. 1884 C, 34 ("fish").
1884 D, 270 ("fish").
1884 E, 326 ("fish").
1885 E, 90.
Dana, J. D. 1896 A, 557, figs. 800-804.
Eastman, C. R. 1907 B, 12, 29.
1908 A, 73.
1917 A, 239.
Lambe, L. M. 1904 C, 15 (P. elliptica).
Symonds, W. S. 1884 A, 159 ("fish").
Silurian (Salina); Pennsylvania.

Palæaspis bitruncata Claypole.

Claypole, E. W. 1884 A, 1224.
Hay, O. P. 1902 A, 340 (P. americana, in part).
Bryant, W. L. 1926 B, 264, pl. ii, fig. 3; pl. iii, figs. 2-5.
Claypole, E. W. 1885 E, 90.
Moodie, R. L. 1926 A, 67, 76.
Silurian (Salina); Pennsylvania.

EUPHANEROPIDÆ A. S. Woodward.

Hay, O. P. 1902 A, 341.
Eastman, C. R. 1907 B, 23.
Goodrich, E. S. 1909 A, 206.
Jordan, D. S. 1923 A, 86.
Kiaer, J. 1924 A, 136.
Lambe, L. M. 1904 C, 40.
Sauvage, H. E. 1905 A, 189.
Simpson, G. G. 1925 D, 289.
Zittel and Woodward 1902 A, 54.
This family may belong in the Cephalaspidomorphi (Osteostraci).

EUPHANEROPS Woodward. Type *E. longævus Woodward.*

Hay, O. P. 1902 A, 341.
Jordan, D. S. 1920 C, 491.
Kiaer, J. 1924 A, 125.
Lambe, L. M. 1912 A, 4.
Sauvage, H. E. 1905 A, 189.
Simpson, G. G. 1926 C, 400.
Whiteaves, J. F. 1907 B, 247.
Woodward, A. S. 1922 C, 54.
Zittel and Woodward 1902 A, 54.

Euphanerops longævus Woodward.

Hay, O. P. 1902 A, 341.
Ami, H. M. 1901 A, 174.
Clarke, J. M. 1913 A, 113.
Eastman, C. R. 1907 B, 16, 31.
1908 A, 280.
Kiaer, J. 1924 A, 29, 56, 58, 95, 125.
Lambe, L. M. 1904 C, 16, 34, 40.
Sauvage, H. E. 1905 A, 189.
Whiteaves, J. F. 1907 B, 248.
Zittel and Woodward 1902 A, 54.
Upper Devonian (Scaumenac); Quebec.

PSAMMOSTEIDÆ Traquair.

Traquair, R. H. 1899 A, 847.
Andreæ, A. 1901 B, 507.
Bryant, W. L. 1926 B, 257.
Dean, Gudger, Henn 1923 A, 663.
Eastman, C. R. 1908 A, 55.
1915 B, 439.
Goodrich, E. S. 1909 A, 198.
Jaekel, O. 1911 A, 36.
1925 B, 168 ("psammosteiden").
Jordan, D. S. 1923 A, 85.
Kiaer, J. 1915 A, 21.
1924 A, 114.
Patten, W. 1912 A, 366.
Preobrajensky, J. A. 1911 A, 19, 34.
Reis, O. M. 1894 A, 64 ("psammosteiden").
Sauvage, H. E. 1901 C, 66.
Woodward, A. S. 1922 C, 55.
Besides *Psammosteus*, Jordan refers to this family *Acanthaspis* and *Acantholepis*.

PSAMMOSTEUS Agassiz. Type *P. mœandrinus* Agassiz.

Agassiz, L. 1844 B (1845), 103.
Dames, W. 1898 C, 331.
Dean, Gudger, Henn 1923 A, 401.
Goodrich, E. S. 1909 A, 196, fig. 166.
Kiaer, J. 1915 A, 21, 34, 54.
Matthew, W. D. 1908 H, 110.
Moodie, R. L. 1926 A, 76.
Preobrajensky, J. A. 1911 A, 24, 28, figs. 6-9.
Traquair, R. H. 1899 A, 847.
1900 C, 504.
Woodward, A. S. 1895 B, 38, fig. 1.
1911 B, 649, pl. ix.
1915 B, lxiv.
1920 D, 28.
Zittel and Schlosser 1923 A, 31.

Psammosteus anglicus? Traquair.

Traquair, R. H. 1898 A, 67, pl. i, figs. 1, 2.
Ami, H. M. 1901 B, 309, 312 (This species?).
Twenhofel, W. H. 1913 A, 303 (This species?).
Woodward, A. S. 1900 E, 203 (This species?).
1901 C, 312 (This species?).
1902 D, 203 (This spesies?).
Lower Old Red Sandstone; England: Lower Devonian (Knoydart); Nova Scotia.

Psammosteus arcticus Kiaer.

Kiaer, J. 1915 A, 23, pl. ii, figs. 5-7; pl. iii, figs. i-iv; pl. v, figs. 4-5.
Ellesmere Land.

Psammosteus complicatus Kiaer.

Kiaer, J. 1915 A, 26, pl. ii, fig. 8; pl. v, figs. 1-3; pl. vi, fig. 1-3; text-fig. 5.
Upper Devonian ; Ellesmere Land.

Order CEPHALASPIDOMORPHI Goodrich.

Goodrich, E. S. 1909 A, 200.
Unless otherwise indicated the authors, as cited below, use the name Osteostraci.
Hay, O. P. 1902 A, 340.
Abel, O. 1912 F, 432.
1919 A, 69.
1920 A, 321.
Andreae, A. 1901 B, 507.
Bridge, T. W. 1904 A, 527, 749.
Claypole, E. W. 1900 A, 247.
Cope, E. D. 1891 N, 9.
Dean, B. 1900 A, 22 et seq.
1901 C, 113.
Eastman, C. R. 1903 E, 573.
1907 B, 23, 27, 31.
1908 A, 69, 74.
Gaskell, W. H. 1908 A, 531.
Huene, F. 1926 A, 260.
Jaekel, O. 1903 D, 41.
Jordan, D. S. 1905 A, I, 575; II, 584.
1907 B, 759.
1923 A, 86.
Kemna, A. 1903 A, 348, 371.
Kiaer, J. 1924 A, 114, 115 (Osteostraci); 117 (Cephalaspidomorphi).
1928 A, 117, 124 ("cephalaspids").
Koken, E. 1899 B, 172 (Aspidocephali).
Lankester, E. R. 1868 A, 14.
1870 C, 33, 62.
Parker and Haswell 1897 A, 244.
Patten, W. 1902 A, 389 (Peltacephalata).
1903 D, 28 (Peltacephalata).
Pompeckj, J. F. 1913 A, 1113.
Regan, C. T. 1904 A, 340, 344.
1923 B, 458.
Rosén, N. 1916 A, 14, 30.
Schlosser, M. 1917 A, 132, 133.
Stensiö, E. A. 1927 A, 16.
Stromer, E. 1920 A, 11, 12.
Traquair, R. H. 1900 C, 504.
Woodward, A. S. 1922 C, 57.
Woodward, H. 1878 A, 7.
1920 D, 31.
Zittel and Koken 1911 A, 33.
Zittel and Schlosser 1923 A, 33.
Zittel and Woodward 1902 A, 54 (Aspidocephali).

CEPHALASPIDÆ Owen.

Owen, R. 1846 E, 50.
Hay, O. P. 1902 A, 340.
Abel, O. 1919 A, 73.
Agassiz, L. 1844 D, 142 ("cephalaspides").
Arldt, T. 1907 D, 644.
Bridge, T. W. 1904 A, 528.
Bronn, H. G. 1849 A, 780, seq. (Cephalaspides).
Carus, V. 1875 A, 596.
Dean, B. 1901 C, 110 ("cephalaspids").
Dean, Gudger, Henn 1923 A, 663.
Eastman, C. R. 1904 C, 143.
1906 D, 3.
1907 B, 23.
Fitzinger, L. J. 1873 A, 52 (Cephalaspides).
Gaskell, W. H. 1901 A, 267 (Cephalaspida).
Gebhardt, F. A. M. W. 1907 A, 73, 79 ("cephalaspiden").
Goodrich, E. S. 1904 A, 493.
1909 A, 203.
Gregory, W. K. 1915 D, 341.
Heckel, J. 1851 A, 219 ("cephalaspiden").
Hilzheimer, M. 1913 A, 471.
Hoernes, R. 1886 A, 548.
Howes, G. B. 1902 A, 525 ("cephalaspidians").
Huxley, T. H. 1858 D, 503, 506, pl. xiv.
Jaekel, O. 1902 A, 105 ("cephalaspiden").
1903 D, 53 ("cephalaspiden").
1907 A, 185 ("cephalaspiden").
1911 A, 33 ("cephalaspiden"); 34 (suborder Cephalaspidi).
1913 A, 85 ("cephalaspiden").
1919 A, 83 ("cephalaspiden").
1921 A, 226 ("cephalaspiden").
1925 B, 168 ("cephalaspiden").
1926 A, 168 ("cephalaspiden").
Jordan, D. S. 1907 B, 759.
1923 A, 86.
Kemna, A. 1903 A, 347 ("céphalaspidés").
Kiaer, J. 1924 A, *passim*, fig. 41.
Koken, E. 1899 B, 173.

Lankester, E. R. 1868 A, 1.
1870 C, 62.
1897 A, 45.
Lütken, C. 1871 A, 294 ("céphalaspides").
Moodie, R. L. 1928 A, 348.
Patten, W. 1894 A, 435.
1903 B, 827, 841.
1903 D, 15.
1912 A, 358.
Pompeckj, J. F. 1913 A, 1115.
Powrie, J. 1870 A, 299.
Raymond, P. E. 1925 A, 434 (Cephalaspida).
Regan, C. T. 1904 A, 344.
Schlosser, M. 1917 A, 132 ("cephalaspiden").
Simpson, G. G. 1925 D, 289.
Steinmann, G. 1907 A, 418.
1927 A, 80 ("cephalaspiden").
Stensiö, E. A. 1925 B, 161 ("cephalaspids").
Stetson, H. C. 1928 A, 228 ("cephalaspids").
Traquair, R. H. 1880 A, 147, 152.
Trouessart, E. L. 1906 A, 212.
Wiman, C. 1918 B, 91 ("cephalaspiden").
Woodward, H. 1878 A, 23.
Zittel and Koken 1911 A, 33.
Zittel and Schlosser 1923 A, 34.
Zittel and Woodward 1902 A, 54.

CEPHALASPIS Agassiz. Type *C. lyelli* Agassiz.

Hay, O. P. 1902 A, 341.
Abel, O. 1907 D, (159).
1912 F, 432, 476, 664.
1919 A, 74, figs. 36, 37.
1920 A, 321, fig. 509.
Adams, L. A. 1919 A, 121.
Agassiz, L. 1835 B, 346.
1839 A, 589, pl. i, fig. 1; pl. ii, figs. 1-9.
1844 C, 269.
Arldt, T. 1923 A, 482.
Bordage, E. 1892 A, 333.
Bridge, T. W. 1904 A, 529; figs. 318, 319.
Bronn, H. G. 1848 A, 213.
1849 A, 656.
Claypole, E. W. 1896 B, 356.
1900 A, 246.
Cunningham, J. T. 1912 A, 251.
Davis, J. W. 1880 C, 67.
Dean, B. 1909 B, 817.
Dean, Gudger, Henn 1923 A, 663.
Deeke, W. 1913 A, 88.
Dollo, L. 1910 A, 390.
Eastman, C. R. 1901 C, 328.
1902 C, 506.
1903 E, 573.
1904 C, 141.
1904 F, 703.
1905 A, 40, fig. 2.
1908 A, 58, 74.
1908 B, 31, fig. 5.
Frech, F. 1897 A, 123.
Gaskell, W. H. 1895 A, 36.
1908 A, 109, 521.
1910 A, 11.
Gaudry, A. 1896 A, 169, fig. 149.
Goodrich, E. S. 1904 A, 493.
1909 A, 201, figs. 173, 174.
Gregory, W. K. 1915 D, 319.
Heilprin, A. 1887 A, 149, 301.
Huxley, T. H. 1858 D, 502.
1861 D, 458.
1861 E, 420.
Jaekel, O. 1903 E, 90, figs. 3, 4.
1911 A, 35, fig. 21.
1926 A, 166.
Kemna, A. 1903 A, 343, 345, fig. 12.
Kiaer, J. 1924 A, 96, fig. 41.
Lankester, E. R. 1864 C, 442.
1864 D, 292.
1865 B, 517.
1868 A, 14, fig. 4.
1870 C, 43.
Lankester, E. R. 1897 A, 45.
1905 A, 258, figs. 186, 187.
Leriche, M. 1906 C, 37.
Lucas, F. A. 1901 J, 24, fig. 4.
Lütken, C. 1868 C.
MacBride, E. W. 1910 A, 17.
McMurrich, J. P. 1901 A, 406.
Mantell, G. A. 1844 A, 645.
Meek, A. 1916 A, 34.
Moodie, R. L. 1928 A, 349.
Murchison, R. T. 1854 A, 252, pl. xxvii.
Osborn, H. F. 1905 N, 235.
1916 E, 608.
1917 B, 175.
Owen, R. 1866 A, 197.
Patten, W. 1894 A, 436.
1902 A, 379, 389.
1902 B, 181.
1903 B, 829, pls. i, ii; text-figs. 5-7, 10.
1903 C, 488.
1903 D.
1904 A, 113.
1912 A, 302, 343, 350, figs. 232, 234.
Pompeckj, J. F. 1913 A, 1113, fig. 10.
Powrie, J. 1861 A, 137, 189, fig.
1870 A, 284.
Regan, C. T. 1904 A, 345.
Steinmann, G. 1908 A, 204.
Stensiö, E. A. 1927 A, 316, 326, pls. i-xii, xvi-xl, xliii, lxi-xcix, cv-cxii.
Traquair, R. H. 1899 B, 591, pl.
1900 C, 504.
Trouessart, E. L. 1906 A, 213.
Wiman, C. 1918 B, 92.
Woodward, A. S. 1906 C, 268, fig. 2.
1910 D, 31.
1920 D, 31, fig. 4.
1922 C, 57, fig. 53.
1925 A, 124.
Woodward, H. 1878 A, 6, pl. i, fig. 4; text-figs. 7, 9.
Zittel and Koken 1911 A, 33.
Zittel and Schlosser 1923 A, 34, figs. 41-43.
Zittel and Woodward 1902 A, 54.

Cephalaspis campbelltonensis Whiteaves.

Hay, O. P. 1902 A, 341.
Eastman, C. R. 1907 B, 12.
1908 A, 275.
Jaekel, O. 1895 C, 161 (C. campbelltonensis, C. whiteavesi).
Lambe, L. M. 1904 C, 15, 33, 40.

Patten, W. 1902 B, 186.
Whiteaves, J. F. 1907 B, 259.
Lower Devonian; New Brunswick.

Cephalaspis dawsoni Lankester.

Hay, O. P. 1902 A, 341.
Barkas, W. J. 1874 D, 549.
Dawson, J. W. 1870 B, 271 ("Cephalaspis").
Eastman, C. R. 1907 B, 13.
1908 A, 275.
Lambe, L. M. 1904 C, 14, 15, 33, 40.
Lankester, E. R. 1870 D, 223.
Lower Devonian; Quebec.

Cephalaspis jexi Traquair.

Hay, O. P. 1902 A, 341.
Eastman, C. R. 1907 B, 13.
Lambe, L. M. 1904 C, 15, 33, 40.
Whiteaves, J. F. 1907 B, 260.
Lower Devonian; New Brunswick.

Cephalaspis laticeps Traquair.

Hay, O. P. 1902 A, 341.
Clarke, J. M. 1913 A, 113.
Eastman, C. R. 1907 B, 16.
1908 A, 280.
Lambe, L. M. 1904 C, 16, 34, 40.
1912 A, 4.
Whiteaves, J. F. 1907 B, 248.
Upper Devonian (Scaumenac); Quebec.

Cephalaspis sp. indet.

Ami, H. M. 1901 B, 309. Lower Devonian (Knoydart); Nova Scotia.
Eastman, C. R. 1907 B, 13. Lower Devonian (Campbelltown); Nova Scotia.
1908 A, 275. Lower Devonian (Campbelltown); Nova Scotia.
Twenhofel, W. H. 1913 A, 303. Lower Devonian (Knoydart); Nova Scotia.
Whiteaves, J. F. 1907 B, 261. Lower Devonian (Campbelltown); Nova Scotia.

Subclass AZYGOSTEI Hay.

Hay, O. P. 1902 A, 341.
Dean, B. 1902 C, 703.
Jordan, D. S. 1903 A, 136.
1923 A, 86.

Superorder PLACODERMI M'Coy.

M'Coy (Ann. Mag. Nat. Hist., ser. 2, vol. ii, 1848, 6) included in this group *Bothriolepis, Asterolepis, Psammosteus, Chelyphorus,* and *Cocosteus;* and expressly excludes *Cephalaspis.* On page 278 of the same volume he includes *Pterichthys, Pamphractus, Polyphractus, Coccosteus, Asterolepis, Bothriolepis* and *Psammosteus.*

Hay, O. P. 1902 A, 342.
Abel, O. 1927 B, 314, figs. 1-3 ("panzerfische").
Adams, L. A. 1919 A, 120.
Allis, E. P. 1905 A, 492.
Arldt, T. 1907 D, 674.
1923 A, 481 ("panzerfische").
Carus, V. 1875 A, 596 (Placodermata).
Cope, E. D. 1880 U, 150 ("placodermes").
1891 B, 455 (Placodermata).
Dean, B. 1901 A, 87 ("placoderms").
1912 A, 226.
1916 A ("fishes").
Dean, Gudger, Henn 1923 A, 592, 665.
Depéret, C. 1907 B ("placodermes").
Eastman, C. R. 1901 C, 329 (Placodermata).
1906 D, 2 (Placodermata).
1907 B, 233.
Eastman, C. R. 1908 A, 160.
1917 A, 244.
Filhol, H. 1889 A, 224 ("placodermes").
Gebhardt, F. A. M. W. 1907 A, 72 ("placodermen").
Hilzheimer, M. 1913 A, 471.
Hoffmann, G. 1916 A, 491 ("panzerfische").
Hussakof, L. 1906 A, 128 (Placodermata).
Hussakof and Bryant 1919 A, 22 (Placodermata).
Moodie, R. L. 1926 A, 76.
Plate, L. 1926 A, 44 ("placodermen").
Pompeckj, J. F. 1913 A, 1110.
1926 A, 71 ("placodermen").
Regan, C. T. 1904 A, 330, 331, 340.
Schlosser, M. 1917 A, 146 ("placodermen").
Steinmann, G. 1907 A, 416.
Stromer, E. 1920 A, 9.
Traquair, R. H. 1880 A, 152, 158 (Placodermata).
Weidenreich, F. 1922 A, 44 ("placodermen").
Woodward, H. 1878 A, 19, 22.
Zittel and Koken 1911 A, 86.
Zittel and Schlosser 1923 A, 26.

Order ANTIARCHA Cope.

Hay, O. P. 1902 A, 342.
Abel, O. 1920 A, 323 (Antiarchi).
Andreae, A. 1901 B, 507.
Arldt, T. 1907 D, 282.
1912 A, 648 (Antiarchi).
1923 A, 482 ("antiarchen").
Barrell, J. 1915 B, 402.
Bridge, T. W. 1904 A, 532 (Antiarchi).
Cope, E. D. 1885 BB, 63.
1891 N, 9.
Dean, B. 1900 A, 22, seq.
1901 C, 113.
Eastman, C. R. 1907 B, 23, 32, 225.
1908 A, 56, 69, 74 (Antiarchi).
Gaskell, W. H. 1908 A, 29, 326, 343 (Antiarchi).
Goodrich, E. S. 1909 A, 206 (Pterichthyomorphi).
Gregory, W. K. 1915 D, 318.
Huene, F. 1926 A, 260.
Hussakof, L. 1906 A, 129.
Hussakof and Bryant 1919 A, 22 (Antiarchi).

Jaekel, O. 1902 A, 103 (Temnauchenia).
1903 B, 12 ("placodermen").
1903 D, 41 ("placodermen").
1903 F, 37 ("placodermen").
1906 A, 28 ("placodermen").
1906 B, 76 ("placodermen").
1906 C, 157 ("placodermen").
1906 D, 180 ("placodermen").
1907 A, 170 ("placodermen").
1909 A, 198 ("placodermen").
1911 A, 37, 44 (Placodermata).
1911 A, 38 (Asterolepidi); 47 (Coccostei).
1919 A, 73 ("placodermen").
1921 A, 233 ("placodermen").
1925 B, 170 ("placodermen").
1926 A, 172 ("placodermen").
1926 D, 71.
1927 B, 332 ("placodermen").
Jordan, D. S. 1905 A, I, 576, 581; II, 557, 586.
1907 B, 759.
1923 A, 86.
Kemna, A. 1903 A, 348 (Antiarchi).
1904 A, 24 ("placodermes").
Kiaer, J. 1924 A, 107, 114, 123 (Antiarchi); 117 (Pterichthyomorphi).
Kingsley, J. S. 1885 A, 92.
Koken, E. 1893 B, 143, 172 ("placodermen").
Leunis and Ludwig 1883 A, 777 (Placodermata).
Lütken, C. 1868 C.
1871 A, 294 ("placodermes").
Osborn, H. F. 1917 B, 165, 167, fig. (Antiarchi).
Osburn, R. C. 1907 B, 173.
Parker and Haswell 1897 A, 244.
Patten, W. 1912 A, 367.
Pompeckj, J. F. 1913 A, 1110, 1115.
Regan, C. T. 1923 B, 458 (Asterolepida).
Rosén, N. 1916 A, 11 (Antiarchi).
Schlosser, M. 1917 A, 133 (Antiarchi).
Schmalhausen, J. J. 1913 A, 76.
Simpson, G. G. 1925 D, 289 (Antiarchi).
1926 J, 173.
Stensiö, E. A. 1925 B, 189.
Stromer, E. 1920 A, 12, 16 (Antiarchi).
Traquair, R. H. 1900 C, 504 (Asterolepida).
Woodward, A. S. 1898 B, 12.
1920 D, 33 (Antiarchi).
Zittel and Koken 1911 A, 35.
Zittel and Schlosser 1923 A, 36 (Antiarchi).
Zittel and Woodward 1902 A, 56.

ASTROLEPIDÆ Traquair.

Traquair, R. H. 1888 C, 485.
Unless otherwise indicated the authors, as quoted, write the name of this family Asterolepidæ.
Hay, O. P. 1902 A, 342.
Abel, O. 1907 D, (167).
1908 D, (211), ("asterolepiden").
1912 F, 596 ("asterolepiden").
1919 A, 88.
Barrell, J. 1915 B, 393.
Bridge, T. W. 1904 A, 534.
Dean, B. 1902 C, 703 ("pterichthyids").
1912 A, 226 ("pterichthyids").
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1902 C, 507 ("Pterichthydæ").
1904 C, 141, 143.
1906 D, 3.
1907 B, 23, 33, 225.
1908 A, 56, 75 ("asterolepids").
Gebhardt, F. A. M. W. 1907 A, 73 ("asterolepiden").
Goodrich, E. S. 1909 A, 209.
Hoernes, R. 1886 A, 546 (Pterichthyidæ).
Hoffmann, G. 1911 A, 285 ("asterolepiden").
Hussakof, L. 1906 A, 131.
Jaekel, O. 1902 A, 106, 113 ("asterolepiden").
1903 D, 41, 58 ("asterolepiden").
Jaekel, O. 1903 F, 39 ("pterichthyiden").
1906 D, 187 ("asterolepiden").
1911 A, 37 ("asterolepiden"; Pterichthyi).
1919 A, 101 ("asterolepiden").
1921 A, 226 ("asterolepiden").
1925 B, 166 ("asterolepiden").
1926 A, 168 ("asterolepiden").
Jordan, D. S. 1905 A, I, 576; II, 557.
1907 B, 759.
1923 A, 86.
Kemna, A. 1904 A, 52 ("astérolépidés").
Kiaer, J. 1924 A, 116 (Asterolepididæ); 117 (Pterichtyidæ).
Lankester, E. R. 1897 A, 45.
Osborn, H. F. 1902 H, 749 ("asterolepids").
Patten, W. 1902 A, 392 (Pterichydæ).
1902 B, 180 (Pterichthydæ).
1903 D, 29.
Pompeckj, J. F. 1913 A, 1115.
Regan, C. T. 1904 A, 340.
Schlosser, M. 1917 A, 133 ("asterolepiden").
Steinmann, G. 1907 A, 418.
Weidenreich, F. 1922 A, 44 (Asterolepis).
Zittel and Koken 1911 A, 37.
Zittel and Schlosser 1923 A, 36.
Zittel and Woodward 1902 A, 56.

ASTROLEPIS Eichwald. Type *A. ornata* Eichwald.

Unless otherwise indicated, the authors, as quoted, write this name *Asterolepis*.
Hay, O. P. 1902 A, 342.
Abel, O. 1912 F, 598.
1919 A, 90, fig. 51.
1927 A, (31).
Arldt, T. 1923 A, 482.
Barkas, W. J. 1874 D, 549.
Bronn, H. G. 1848 A, 121.
Chapman, F. 1916 A, 211.
Darton, N. H. 1906 A, 563.
Delafontaine, M. 1877 A, 267.
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1903 E, 574.
1907 B, 39, 225.
1908 A, 82.
Eichwald, E. 1840 B, 425.
Frech, F. 1897 A, 82.
Gaskell, W. H. 1895 A, 36 (Astrolepis).
1908 A, 326, 342.
Gebhardt, F. A. M. W. 1907 A, 81.
Goodrich, E. S. 1909 A, 506.

Heilprin, A. 1887 A, 302.
Hoffmann, G. 1909 A, 491, figs. 1-3.
1911 A, 285.
Hussakof, L. 1906 A, 134.
1908 C, 311.
Jaekel, O. 1902 A, 110.
1903 D, 45, figs. 3-5, 7, 8.
1903 E, 86.
1903 F, 35.
1919 A, 102, fig. 15.
1926 A, 164, 166.
Jordan, D. S. 1919 B, 206 (Astrolepis).
Miller, J. 1851 A, 92.
1869 A, 384.
Pompeckj, J. F. 1913 A, 1115.
Traquair, R. H. 1880 A, 155.
1904 A, 91.
Woodward, A. S. 1900 H, 1.
1915 B, lxiv.
Zittel and Koken 1911 A, 38.
Zittel and Schlosser 1923 A, 38, figs. 48, 49.
Zittel and Woodward 1902 A, 57.

Astrolepis clarkei Eastman.

Eastman, C. R. 1907 B, 40, pl. vii, figs. 7, 8 (Asterolepis).
Eastman, C. R. 1907 B, 13, 225 (Asterolepis).
1908 A, 83, 275 (Asterolepis).
Williams and Breger 1916 A, 293, pl. xxii, fig. 19 (Asterolepis).
Lower Devonian (Chapman); Maine.

Astrolepis incisa Woodward.

Woodward, A. S. 1900 H, 6, pl. i, figs. 11-13 (Asterolepis).
Upper Devonian; East Greenland.

Pterichthyodes Bleeker. Type *Pterichthys milleri* Agassiz.

Unless otherwise indicated the authors, as cited, use the name *Pterichthys*.
Bleeker, P. 1839, Tentamen, 11 (Pterichthyodes).
Hay, O. P. 1902 A, 343 (Pterichthyodes).
Abel, O. 1907 D (160).
1908 E, 413, fig. 5.
1909 D, (226).
1912 B, 76, fig. 26.
1912 F, 445, 598.
1919 A, 88, figs. 49, 50.
1920 A, 323, fig. 513.
Agassiz, L. 1844 C, 269.
Allis, E. P. 1905 A, 493.
Arldt, T. 1923 A, 482.
Barkas, W. J. 1874 D, 552.
Böker, H. 1927 A, 36.
Bordage, E. 1892 A, 333, fig. 4.
Bridge, T. W. 1904 A, 533.
Bronn, H. G. 1848 B, 1051.
1849 A, 656.
Cunningham, J. T. 1912 A, 250.
Davis, J. W. 1880 C, 67.
Dean, Gudger, Henn 1923 A, 664.
Deecke, W. 1913 A, 88.
Delafontaine, M. 1877 A, 268.
Eastman, C. R. 1898 E, 183.
1903 E, 574.
1904 C, 142.
1905 A, 40, fig. 1.
1906 A, 141.
1906 D, 1.
1907 B, 32, 233.
1908 A, 57, 75, 76, figs. 9-11.
Frech, F. 1897 A, 123.
Gadow, H. 1910 A, 28.
Gaskell, W. H. 1895 A, 36.
1908 A, 533.
Gaudry, A. 1896 A, 19, fig. 25.
Goodrich, E. S. 1909 A, 208, fig. 161.
Gregory, W. K. 1922 A, 3.
Heilprin, A. 1887 A, 149, 301.
Hoernes, R. 1886 A, 547.
Hoffmann, G. 1909 A, 491.
1911 A, 287.
Hussakof, L. 1906 A, 131.
Huxley, T. H. 1858 D, 505, 515.
1861 D, 449, fig. 19.
Jaekel, O. 1902 A, 110.
1903 B, 12.
1903 D, 41, 56.
1911 A, 38.
1919 A, 101 (Pterichthys).
Jordan, D. S. 1903 A, 136.
1905 A, i, 576; ii, 588 (Pterichthyodes).
1919 B, 209 (Pterichthyodes).
Kemna, A. 1903 A, 343.
1904 A, 61.
Kiaer, J. 1924 A, 110.
Koken, E. 1893 B, 143, 174.
Koschkaroff, D. N. 1906 A, 298.
Lankester, E. R. 1897 A, 45.
1905 A, 252, figs. 183, 184.
Longmuir, —. 1860 A, 263.
Lucas, F. A. 1901 J, 25, fig. 5.
Lütken, C. 1868 C.
MacBride, E. W. 1910 A, 18.
Mantell, G. A. 1844 A, 646, fig. 135.
Miller, H. 1851 A, 91.
1857 A, 98, fig. 57.
Murchison, R. I. 1841 A, 99.
1854 A, 251, fig. 47.
Osborn, H. F. 1905 N, 235.
1916 E, 606, fig. 14.
1917 B, 166, 170, fig.
Patten, W. 1902 A, 379, 389.
1903 A, 223.
1903 D.
1912 A, 343.
Perrier, E. 1920 A, 272.
Pompeckj, J. F. 1913 A, 1114, fig. 12.
Regan, C. T. 1904 A, 34, fig. 4.
Schuchert, C. 1915 A, 686, fig. 408.
Schuchert and Levene 1927 A, 267, fig.
Stromer, E. 1905 D, 315.
Traquair, R. H. 1880 A, 150, 155.
1900 C, 504.
1904 A, 94.
Woodward, A. S. 1897 C, 379.
1906 C, 269, fig. 3.
1915 B, lxiv.
1920 D, 33.
1922 C, 59, fig. 54.
Woodward, H. 1878 A, 14, pl. i, fig. 5.

Zittel and Koken 1911 A, 37.
Zittel and Schlosser 1923 A, 37, figs. 46, 47.
Zittel and Woodward 1902 A, 56.
No American species of this genus has yet been discovered.

Bothriolepis Eichwald. Type *B. prisca* Eichwald.

Hay, O. P. 1902 A, 343.
Abel, O. 1907 D, (166).
1912 F, 561, 598.
Adams, L. A. 1919 A, 122, fig. 3.
Allis, E. P. 1905 A, 493.
Barkas, W. J. 1874 D, 548 (Stenacanthus); 549 (Bothriolepis).
Bordage, E. 1892 A, 334, fig. 4.
Bronn, H. G. 1848 A, 172.
1849 A, 655.
Clarke, J. M. 1911 A, 128.
Claypole, E. W. 1883 C, 281.
Dean, B. 1908 A, 202.
1912 A, 226.
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1903 E, 574.
1906 A, 141.
1907 B, 32, 42.
1908 A, 79, 83.
Eichwald, E. 1840 B, 425 (Bothryolepis).
Frech, F. 1897 A, 123.
Gaskell, W. H. 1895 A, 36.
1908 A, 520.
1910 A, 12.
Gebhardt, F. A. M. W. 1907 A, 81.
Goodrich, E. S. 1909 A, 206, 209.
Gregory, W. K. 1915 D, 319.
1917 A, 378, fig. 5.
1922 A, 3.
Heilprin, A. 1887 A, 302.
Hoffmann, G. 1909 A, 492.
1911 A, 285, figs. 24, 25.
Hussakof, L. 1906 A, 131, 143.
Hussakof and Bryant 1919 A, 23.
Huxley, T. H. 1861 D, 436.
Jaekel, O. 1903 D, 48.
1926 A, 164.
Kemna, A. 1904 A, 19.
Kingsley, J. S. 1925 A, 90, fig. 94.
Koken, E. 1893 B, 175.
Lambe, L. M. 1904 C, 16.
Lewis, F. T. 1907 A, 657.
Lull, R. S. 1917 B, 469.
Moodie, R. L. 1915 I, 141, 165, figs. 1, 2.
1920 D, 14.
1923 B, 292.
1926 A, 76, 84.
Osborn, H. F. 1916 E, 603, fig. 10.
1917 B, 165, 167, 170, fig.
Owen, R. 1866 A, 378.
Patten, W. 1903 A, 223.
1903 C, 488.
1903 D.
1904 A, 113, figs. 1-6.
1905 A, 297.
1905 B, 140.
1906 A, 283.
Pompeckj, J. F. 1913 A, 1110, 1115.
Roberts, G. E. 1863 A, 389.
Stensiö, E. A. 1921 A, 44.
Traquair, R. H. 1904 A, 107.
1906 A, 119, pls. xxvii-xxxi.
1908 B, 326.
Watson and Day 1916 A, 37.
Wiman, C. 1918 B, 90.
Woodward, A. S. 1897 C, 379.
1900 H, 9.
1913 B, 82, pl. x, fig. 3.
1915 B, lxiv.
1917 G, lxxx.
1920 D, 34.
Zittel and Koken 1912 A, 39.
Zittel and Schlosser 1923 A, 39.
Zittel and Woodward 1902 A, 58.

Bothriolepis canadensis Whiteaves.

Hay, O. P. 1902 A, 343.
Abel, O. 1907 D, (160, 166).
1912 F, 598.
1919 A, 91, fig. 52.
Bridge, T. W. 1904 A, 534.
Clarke, J. M. 1913 A, 113, 2 figs.
Claypole, E. W. 1883 C, 278 (Pterichthys).
Cope, E. D. 1885 BB, 63.
1891 N, 9, fig. 2.
Eastman, C. R. 1904 B, 254.
1907 B, 16, 43, text-figs. 10-12.
1908 A, 84, 280, figs. 12-14.
1917 A, 240.
Goodrich, E. S. 1909 A, 206, fig. 180.
Hoffmann, G. 1911 A, 300, text-figs. 16, 23.
1916 A, 491, figs. 1-4.
Hussakof, L. 1906 A, 131, fig. 14.
Hussakof and Bryant 1919 A, 23.
Jaekel, O. 1903 D, 42, 57.
Jordan, D. S. 1908 B, 807.
Kiaer, J. 1915 A, 41, 42.
Lambe, L. M. 1904 C, 14, 16, 34, 40.
1912 A, 4.
Moodie, R. L. 1923 B, 320, pl. lxiv.
1926 A, 67, pl. vi, text-fig. 1.
Patten, W. 1905 B, 140.
1912 A, 483, figs. 247-257.
Rogers, A. F. 1924 A, 546.
Stromer, E. 1912 A, 40, fig. 52.
Traquair, R. H. 1904 A, 112, figs. 57-59.
Whiteaves, J. F. 1907 B, 249, pls. i, ii.
Woodward, A. S. 1900 H, 9.
Upper Devonian (Scaumenac); Quebec.

Bothriolepis coloradensis Eastman.

Eastman, C. R. 1904 B, 255, figs. 1, 4.
Cross, W. 1905 C, 4 ("Bothriolepis." This species?).
1910 A, 5.
Eastman, C. R. 1907 B, 20, 53.
1908 A, 94, 285.
1915 A, 280.
1917 A, 240.
Upper Devonian (Elbert); Colorado.

Bothriolepis hydrophila Agassiz.

Agassiz, L. 1844 A, 5, 21, pl. iv, figs. 4-7 (Pamphractus hydrophilus); 21 (P. andersoni); 134, pl. xxxi, fig. 6 (Homothorax flemmingii).

Kiaer, J. 1915 A, 39, 41, 54, pl. vii, figs. 1-6 (This species?).
Miller, H. 1848, in Egerton, P. G., 1848 A, 312, 314 (Pterichthys).
Powrie, J. 1862 A, 435 (Pterichthys).
Traquair, R. H. 1888 B, 510.
1888 C, 500, pl. xviii, figs. 4, 5.
Woodward, A. S. 1891 A, 230, pl. vi, fig. 9, text-figs. 35.
Upper Devonian (Old Red); Scotland. Upper Devonian?; Ellesmere Land.

Bothriolepis leidyi Newb.

Newberry, J. S. 1889 A, 109, 111, pl. xviii, fig. 2; pl. xx, figs. 1-5.
Hay, O. P. 1902 A, 344 (B. nitida part).
Clarke and Ruedmann 1903 A, 765 (This species?).
Claypole, E. W. 1903 A, 321.
Cross, W. 1905 C, 4 ("Bothriolepis." This species?).
Eastman, C. R. 1904 B, 257 (This species?).
1907 B, 50 (Syn. of B. nitida).
Upper Devonian (Catskill); Pennsylvania, New York.

Bothriolepis minor Newb.

Hay, O. P. 1902 A, 343.
Clarke and Ruedmann 1903 A, 965.
Claypole, E. W. 1903 A, 321.
Eastman, C. R. 1907 B, 20, 52; fig. 13.
1908 A, 93, 287, 289.
Hussakof, L. 1908 A, 5.
Upper Devonian (Chemung); Pennsylvania: (Catskill); New York.

Bothriolepis nitida (Leidy).

Hay, O. P. 1902 A, 344.
Barkas, W. J. 1874 D, 548 (Stenacanthus).
Claypole, E. W. 1903 A, 320 (Stenacanthus nitidans).
Eastman, C. R. 1907 B, 22, 50; pl. iii, fig. 4; pl. vii, fig. 1.
1908 A, 92, 289.
1915 A, 280.
1917 A, 240.
Hussakof, L. 1908 A, 5.
Hussakof and Bryant 1919 A, 23.
Upper Devonian (Chemung, Catskill); Pennsylvania, New York.

Bothriolepis traquairi Bryant.

Bryant, W. L. 1924 A, 54, pls. i, ii.
Upper Devonian (Scaumenac); Quebec.

Bothriolepis sp. indet.

Abel, O. 1926 B, 217. Upper Devonian, Grand Canyon, Arizona.
Cross, W. 1905 A, 3. Devonian (Elbert); Colorado.
Kiaer, J. 1915 A, 43 (This genus?). Upper Devonian; Ellesmere Land.
Schuchert, C. 1918 A, 361. Devonian; Arizona.

Order COCCOSTEOMORPHI Goodrich.

Goodrich, E. S. 1909 A, 258.
Unless otherwise indicated, the authors, as cited, apply to this group the name Arthrodira.
Hay, O. P. 1902 A, 344.
Abel, O. 1912 F, 439, 440, 487.
1919 A, 92.
1920 A, 323.
Adams, L. A. 1919 A, 124.
Arldt, T. 1907 D, 282.
1912 A, 648.
1923 A, 482 ("arthrodiren").
Barrell, J. 1915 B, 402.
Berry, E. W. 1925 A, 358.
Branson, E. B. 1918 A, 89.
Bridge, T. W. 1904 A, 535, 731.
Bryant, W. L. 1926 B, 257.
Cope, E. D. 1891 N, 14.
Dean, B. 1900 A, 22 (Subclass of Arthrognathi).
1901 C, 110 et seq. (Subclass of Arthrognathi).
1907 A, 46 ("arthrodires").
1908 A, 202.
1909 C, 282.
1914 A, 59.
Dean, Gudger, Henn 1923 A, 589, 611, 664, 665.
Dollo, L. 1906 B, 136 ("arthrodères").
1907 B, 97, 106 ("arthrodères").
Eastman, C. R. 1900 G, 287.
1901 C, 329 ("arthrodires").
1904 C, 141 ("arthrodires").
1905 A, 46, 138 ("arthrodires").
1906 A, 131, 138 ("arthrodires").
Eastman, C. R. 1906 B, 290 ("arthrodires").
1906 D, 1.
1907 A, 211 ("arthrodires").
1907 B, 23, 89, 225.
1908 A, 69, 157, 158.
1917 A, 244 ("arthrodires").
Goodrich, E. S. 1904 A, 494 (Arthrodira).
Gregory, W. K. 1907 D, 447.
1915 D, 318, 342.
1920 A, 219.
Hennig, E. 1920 B, 113.
Howes, G. B. 1902 A, 525.
Huene, F. 1926 A, 260.
Hussakof, L. 1906 A, 105.
1908 C, 312.
1911 B, 123.
Hyde, J. E. 1926 A, 501 ("arthrodires").
Jaekel, O. 1903 D, 57.
1911 A, 47 (Coccostei).
1919 A, 75.
1925 B, 167.
1927 B, 332, 337.
Jordan, D. S. 1903 A, 136.
1905 A, i, 581, 585, 612; ii, 557.
1907 B, 238, 245, 760.
1923 A, 88.
Kemna, A. 1904 A, 65 ("arthrodiriens").
Keyes, C. A. 1922 A, pl. iii.
Kiaer, J. 1924 A, 123.
1928 A, 130 ("arthrodires").
Kingsley, J. S. 1925 A, 118.
Meek, A. 1916 A, 35.
Moodie, R. L. 1915 I, 138 ("arthrodires").

Moodie, R. L. 1926 A, 73, 80.
Osborn, H. F. 1916 E, 601 ("arthrodires").
1917 B, 166, 167, 292, fig.
Osburn, R. C. 1907 B, 173.
Patten, W. 1912 A, 386, 388.
Pompeckj, J. F. 1913 A, 1116, 1119.
Regan, C. T. 1923 B, 458.
Reynolds, S. H. 1897 A, 70.
Sauvage, H. E. 1899 B, 86 (Arthropodira).
Schlosser, M. 1917 A, 132, 133, 146.
Schuchert, C. 1915 A, 688.
Sewertzoff, A. N. 1923 B.
Simpson, G. G. 1926 J, 173.
Stensiö, E. A. 1925 A, 176, 182, 223 (arthrodires").
Stensiö, E. A. 1925 B, 164, 187 ("arthrodirids").
1927 A, 32.
Stromer, E. 1912 A, 35, 48.
1920 A, 15, 16.
Thevenin, A. 1910 A, 35 ("arthrodires").
Williston, S. W. 1912 E, 258.
Woodward, A. S. 1898 B, 64.
1915 B, lxx.
1920 D, 34.
1922 B, 30.
1922 C, 79.
Zittel and Koken 1911 A, 78.
Zittel and Schlosser 1923 A, 39.
Zittel and Woodward 1902 A, 58.

Suborder MACROPETALICHTHYIFORMES, new name.

Dean, B. 1900 A, 22 (Anarthrodira).
1901 C, 110, seq. (Anarthrodira).
1909 C, 281 (Anarthrodira).
Eastman, C. R. 1900 G, 287 (Anarthrodira).
Goodrich, E. S. 1909 A, 262 (Anarthrodira).
Gregory, W. K. 1907 D, 447 (Anarthrodira).
Hussakof, L. 1906 A, 135 (Anarthrodira).
Jaekel, O. 1903 D, 58 (Anarthrodira).
Jordan, D. S. 1905 A, i, 584; ii, 557 (Anarthrodira).
Pompeckj, J. F. 1913 A, 1119 (Anarthrodira).

MACROPETALICHTHYIDÆ Eastman.

Hay, O. P. 1902 A, 349.
Dean, B. 1901 C, 120 (Subcl. Anarthrodira; order Stegothalami).
Eastman, C. R. 1907 B, 23, 99.
1908 A, 167.
Gebhardt, F. A. M. W. 1907 A, 73 ("macropetalichthyiden").
Goodrich, E. S. 1909 A, 262.
Gregory, W. K. 1907 D, 447.
Hennig, E. 1907 B, 591.
Jaekel, O. 1902 A, 112 ("macropetalichthyiden").
1903 D, 58 ("macropetalichthyiden").
1903 F, 39 ("macropetalichthyiden").
1926 A, 181 ("macropetalichthyiden").
Jordan, D. S. 1907 B, 760.
1923 A, 88.
Stensiö, E. A. 1925 B, 92, 164 ("macropetalichthyids").

MACROPETALICHTHYS Norw. and Owen. Type *M. rhapheidolabis* Norw. and Owen.

Hay, O. P. 1902 A, 349.
Allis, E. P. 1905 A, 491.
Arldt, T. 1923 A, 482, 493.
Barkas, W. J. 1874 D, 551.
Bryant, W. L. 1926 B, 256.
Dames, W. 1899 G, 556.
Dean, B. 1900 A, 26.
1901 B, 108.
1901 C, 114, et seq.
1907 A, 48.
Dean, Gudger, Henn 1923 A, 664.
Deecke, W. 1913 A, 89.
Eastman, C. R. 1898 E, 184.
1900 G, 288.
1901 C, 329.
1906 A, 141.
1906 D, 12.
1907 B, 100, 193, 231.
1908 A, 168.
Gregory, W. K. 1915 D, 320.
Heilprin, A. 1887 A, 149.
Hennig, E. 1907 B, 584.
Hussakof, L. 1906 A, 135.
1908 C, 312.
Jaekel, O. 1902 A, 113.
1911 A, 46, fig. 32.
1919 A, 75.
1921 A, 233.
1926 A, 161.
1927 B, 336.
Jordan, D. S. 1923 A, 88.
Kiaer, J. 1915 A, 15.
Kayser, E. 1880 B, 678 (Placothorax a syn.).
Newberry, J. S. 1873 G, 145.
Pompeckj, J. F. 1913 A, 1118.
Stensiö, E. A. 1925 B, *passim*.
Trouessart, E. 1898 B, 7.
Woodward, A. S. 1890 F, 146.
1917 G, lxxx.
Zittel and Koken 1911 A, 83.
Zittel and Schlosser 1923 A, 43.
Zittel and Woodward 1902 A, 58.

Macropetalichthys rhapheidolabis Norw. and Owen.

Hay, O. P. 1902 A, 349 (M. rhapheidolabis, M. sullivanti).
Bronn, H. G. 1848 C (Pterichthys norwoodi, P. norwoodanus).
Claypole, E. W. 1896 B, 354 (M. sullivanti).
1903 A, 312, 319 (M. rhapheidolabis, M. sullivanti).
Dames, W. 1899 G, 556, fig. (M. sullivanti).
Eastman, C. R. 1907 B, 14, 103, 231, pl. ix, fig. 5; pl. xi; text-figs. 19-21.
1908 A, 168, 278, fig. 24.
Hussakof, L. 1908 A, 16.
Hussakof and Bryant 1919 A, 10, 25.
Jaekel, O. 1926 A, 161-184, figs. 1-3.
Kiaer, J. 1915 A, 11, 13, fig. 2 (M. rapheidolabis).

Lambe, L. M. 1904 C, 16, 34, 42 (M. sullivanti (This fish).
Newberry, J. S. 1870 E, 17 (M. sullivanti).
1874 H, 192 (M. sullivanti).
Orton, E. 1878 A, 625, 628 (M. sullivanti).
Stauffer, C. R. 1909 A, 169.
Stensiö, E. A. 1925 B, 91-198, pls. xix-xxviii, xxx, text-figs. 1-13, 15.
Trouessart, E. 1898 B, 7 (M. rhapheidolabis, M. sullivanti).
Whiteaves, J. F. 1877 A, 319 (M. sullivanti).
Middle Devonian (Columbus and Delaware); Ohio, Indiana: (Onondaga); New York: Devonian; Ontario and James Bay, Canada.

Macropetalichthys schei Kiaer.

Kiaer, J. 1915 A, 9, pl. i, figs. 1-6; text-figs. 1, 2.
Upper Devonian?; Ellesmere Land.

ASTEROSTEIDÆ A. S. Woodward.

Hay, O. P. 1902 A, 349.
Dean, B. 1901 C, 121.
Gregory, W. K. 1907 D, 447.
Jordan, D. S. 1907 B, 760.
1923 A, 88.
Zittel and Koken 1911 A, 84.
Zittel and Schlosser 1923 A, 45.

ASTEROSTEUS Newb. Type *A. stenocephalus* Newb.

Hay, O. P. 1902 A, 349.
Arldt, T. 1923 A, 493.
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1907 B, 112, 193, 225.
Zittel and Woodward 1902 A, 58.
Eastman, C. R. 1907 B, 14, 113.
1908 A, 278.
Hussakof, L. 1908 A, 5.
Newberry, J. S. 1874 H, 192.
Orton, E. 1878 A, 626.
Stauffer, C. R. 1909 A, 169.
Zittel and Schlosser 1923 A, 45.
Middle Devonian (Columbus and Delaware); Ohio: (Onondaga?); New York.

Asterosteus stenocephalus Newb.

Hay, O. P. 1902 A, 349.
Claypole, E. W. 1903 A, 319.

Suborder COCCOSTEIFORMES, new name.

Dean, B. 1901 C, 120, 122 (Arthrothoraci).
Goodrich, E. S. 1909 A, 261 (Arthrothoraci).
Gregory, W. K. 1907 D, 447 (Arthrothoraci).
Hussakof, L. 1906 A (Arthrothoraci).
Jaekel, O. 1903 D, 58.
1911 A, 47 (Coccostei).
Jordan, D. S. 1905 A, i, 586; ii, 557 (Arthrothoraci).
1907 B, 760 (Arthrothoraci).

PHYLLOLEPIDÆ A. S. Woodward.

Hay, O. P. 1902 A, 349.
Jordan, D. S. 1923 A, 89.
Zittel and Koken 1911 A, 84.
A family of doubtful standing.

GLYPTASPIS Newb. Type *G. verrucosus* Newb.

Hay, O. P. 1902 A, 349.
Eastman, C. R. 1907 B, 147.
1908 A, 181.
Hussakof, L. 1906 A, 148.
Hussakof and Bryant 1919 A, 92.
Swartz, C. K. 1913 A, 700.
A genus of uncertain relationships.

Glyptaspis eastmani Swartz.

Swartz, C. K. 1913 A, 700, pl. lxxiii, figs. 1-3.
Hussakof and Eastman 1919 A, 104 (Syn.? of Holonema rugosum).
Upper Devonian (Jennings); Maryland.

Glyptaspis verrucosa Newb.

Hay, O. P. 1902 A, 349.
Claypole, E. W. 1896 B, 351 ("Glyptaspis").
1903 A, 320.
Eastman, C. R. 1907 B, 19, 147, 230.
1908 A, 285.
Hussakof, L. 1908 A, 15.
Hussakof and Bryant 1919 A, 103.
Upper Devonian (Cleveland); Ohio.

Glyptaspis sp. indet.

Branson, E. B. 1922 A, 42, 44, 128, pl. xxxi, fig. 3. Upper Devonian (Snyder Creek); Missouri.

PHYLLOLEPIS Agassiz. Type *P. concentrica* Agassiz.

Hay, O. P. 1902 A, 349.
Barkas, W. J. 1874 D, 552.
Bryant, W. L. 1926 B, 270.
Eastman, C. R. 1907 B, 156.
1908 A, 207.
Hussakof and Bryant 1919 A, 21.
Stensiö, E. A. 1927 A, 329, fig. 91.
Woodward, A. S. 1890 F, 147.
1920 D, 31, fig. 3.
1921 A, 179, fig. 20.
Zittel and Schlosser 1923 A, 31, fig. 37.
A genus of uncertain position. A. S. Woodward (1921 A, 179) refers it to the Heterostraci?; Zittel and Schlosser to the Drepanaspidæ.

Phyllolepis delicatula Newb.

Hay, O. P. 1902 A, 349.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 21, 157.

Eastman, C. R. 1908 A, 207, 288.
Hussakof, L. 1908 A, 24.
Upper Devonian (Chemung); Pennsylvania.

Phyllolepis elegans Hussakof and Bryant.

Hussakof and Bryant 1919 A, 21, pl. xxxii, fig. 2.
Upper Devonian (Portage); New York.

HOLONEMA Newb. Type *H. rugosum* (Claypole).

Hay, O. P. 1902 A, 350.
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1908 A, 181, 206.
1908 B, 156.
Traquair, R. H. 1908 B, 324.
Zittel and Koken 1911 A, 84.
Zittel and Schlosser *1923 A, 31.
A genus of uncertain family position.

Holonema abbreviatum (Eastman).

Eastman, C. R. 1907 B, 147, 229, pl. xiii (Glyptaspis).
Eastman, C. R. 1908 A, 282 (Glyptaspis).
Hussakof, L. 1908 A, 15 (Glyptaspis).
Hussakof and Bryant 1919 A, 13, 17, 18, 102, pl. xxxi.
Upper Devonian (Genesee, Portage); New York: (Genesee); Kentucky.

Holonema horridum Cope.

Hay, O. P. 1902 A, 350.
Eastman, C. R. 1907 B, 21, 156.
Eastman, C. R. 1908 A, 206, 288.
Hussakof, L. 1908 A, 23.
Upper Devonian (Chemung); Pennsylvania.

Holonema rugosum (Claypole).

Hay, O. P. 1902 A, 350.
Claypole, E. W. 1903 A, 321.
Eastman, C. R. 1907 B, 21, 156.
1908 A, 206, 288, 289.
Hussakof, L. 1908 A, 23.
Hussakof and Bryant 1919 A, 104, pl. xxxii, fig. 1.
Merrill, G. P. 1907 A, 11 (H. rugosa).
Traquair, R. H. 1908 B, 324, fig. 3.
Upper Devonian (Chemung); Pennsylvania, New York: (Catskill); New York: Middle Devonian; Wisconsin.

Holonema sp. indet.

Hussakof and Bryant 1919 A, 104. Middle Devonian; Wisconsin.

ACANTHASPIDÆ Woodward.

Woodward, A. S. 1891 F, 3.
Jaekel, O. 1925 B, 168 ("acanthaspiden").

ACANTHASPIS Newb. Type *A. armatus* Newb.

Hay, O. P. 1902 A, 332.
Claypole, E. W. 1903 A, 313.
Eastman, C. R. 1904 C, 141.
1906 D, 17.
1907 B, 117, 193, 225.
1908 A, 144.
Gebhardt, F. A. M. W. 1907 A, 80.
Goodrich, E. S. 1909 A, 261, fig. 231.
Hussakof, L. 1906 A, 132, fig. 16.
Hussakof and Bryant 1919 A, 98.
Jaekel, O. 1903 D, 54.
1907 A, 175.
1926 A, 182.
Kemna, A. 1903 A, 346.
Osborn, H. F. 1917 B, 167.
Pompeckj, J. F. 1913 A, 1119.
Regan, C. T. 1904 A, 342.
Stromer, E. 1905 D, 315.
Woodward, A. S. 1891 F, 3, pls. i, ii.
A genus of uncertain systematic position.

Acanthaspis armata Newb.

Hay, O. P. 1902 A, 332.
Claypole, E. W. 1903 A, 321.
Eastman, C. R. 1907 B, 14, 117, 198, pl. ii, fig. 2.
1908 A, 145, 277, pl. i, fig. 14.
Hussakof, L. 1908 A, 22.
Hussakof and Bryant 1919 A, 10, 17, 18, 99, text-figs. 33-35.
Jaekel, O. 1907 A, 175, fig. 4.
Newberry, J. S. 1874 H, 192.
Orton, E. 1878 A, 626.
Stauffer, C. R. 1909 A, 169.
Weller, S. 1902 A, 427.
Woodward, A. S. 1891 F, 3.
Middle Devonian (Onondaga); New York: (Columbus and Delaware); Ohio.

Acanthaspis sp. indet.

Hussakof and Bryant 1919 A, 13, 100, pl. xxviii, fig. 4. Upper Devonian (Genesee); New York: 19, 101, text-fig. 36; Upper Devonian (Portage); New York.

PTYCTODONTIDÆ Woodward.

Hay, O. P. 1902 A, 322.
Abel, O. 1912 F, 439, 487.
1919 A, 103.
Arldt, T. 1923 A, 490 ("ptyctodontiden").
Bridge, T. W. 1904 A, 468.
Dean, B. 1906 B, 136 ("ptyctodontids").
Dollo, L. 1906 B, 135 ("ptyctodontes").
Dollo, L. 1907 B, 97 ("ptyctodontes").
Eastman, C. R. 1904 E, 295.
1907 B, 23, 67, 193.
1908 A, 120, 149.
1915 B, 440 ("ptyctodonts").
1917 A, 242.
Goodrich, E. S. 1909 A, 179.

Gregory, W. K. 1907 D, 447.
Hay, O. P. 1901 B, 68.
Jaekel, O. 1903 G, 391.
1906 D, 180 ("rhynchodonten").
1927 B, 337 ("ptyctodonten").
Jordan, D. S. 1905 A, i, 566.
1907 B, 759.
1923 A, 105.
Petronievics, B. 1919 A, 414 ("ptyctodontes").
Pompeckj, J. F. 1913 A, 1119, 1131.
Sauvage, H. E. 1899 A, 6 ("ptyctodontidés").
Schlosser, M. 1917 A, 133, 147 ("ptyctodontiden").
Stensiö, E. A. 1925 B, 164, 181 ("ptyctodontids").
Stromer, E. 1905 H, 216.
1912 A, 25.
Teller, E. E. 1906 A, 164.
Zittel and Koken 1911 A, 83.
Zittel and Schlosser 1923 A, 44.
Zittel and Woodward 1902 A, 45.

PTYCTODUS Pander. Type *P. obliquus* Pander.

Hay, O. P. 1902 A, 322.
Bridge, T. W. 1904 A, 468.
Dean, B. 1906 B, 134, 150, figs. 116, 126.
1912 A, 226.
Dollo, L. 1907 B, 104.
Eastman, C. R. 1904 E, 295.
1907 B, 70, 193, 233.
1908 A, 119, 120, 133.
1917 A, 242.
Hay, O. P. 1901 B, 68.
Huene, F. 1900 A, 65.
Hussakof and Bryant 1919 A, 107, 108.
Jaekel, O. 1901 A, 560.
1903 G, 391.
1906 D, 182.
Jordan, D. S. 1923 A, 105.
Lambe, L. M. 1904 C, 16.
Leriche, M. 1925 B, 86.
Sauvage, H. E. 1899 A, 7.
Teller, E. 1906 A, 162.
Weller, S. 1902 A, 427.
Zittel and Koken 1911 A, 83.
Zittel and Woodward 1902 A, 45.

Eastman, C. R. 1907 B, 20, 72.
1908 A, 135, 286, pl. v, figs. 18-27.
Hussakof and Bryant 1919 A, 12, 15, 17, 110, pl. xxxvi, figs. 3-9, 11, 12; pl. xxxvii, figs. 1-8, 10-13.
Norton, W. H. 1906 A, 356.
Upper Devonian (State Quarry); Iowa: (Genesee); New York: Middle Devonian (Cedar Valley); Iowa.

Ptyctodus calceolus Newb. and Worth.

Hay, O. P. 1902 A, 322.
Branson, E. B. 1914 A, 64, pl. iii, figs. 3, 4.
1918 A, pl. iv, fig. 16.
1922 A, 6, 22, 44, 45, 126, pl. xxxi, figs. 1, 2.
Calvin, S. 1897 B, 18.
Cleland, H. F. 1911 A, 150, pl. xlviii, figs. 1-17.
Dean, B. 1906 B, fig. 116 (*fide* Branson).
Eastman, C. R. 1904 D, 298.
1907 B, 15, 16, 17, 20, 71.
1908 A, 48, 49, 128, 133, 277, 281, 286, pl. v, figs. 1-17.
Hussakof and Bryant 1919 A, 15, 17, 108, pl. xxxiv; pl. xxxvi, figs. 1, 2, 10; pl. xxxvii, fig. 9.
Lambe, L. M. 1904 C, 34, 42.
Norton, W. H. 1906 A, 356.
Shepard, E. M. 1898 A, 79.
Tyrrell, J. B. 1892 A, 209.
Udden, J. A. 1899 A, 289, 292, 294, 295, 298, 302.
Upper Devonian (Genesee, Portage); New York, Illinois, Missouri, Kentucky: Middle Devonian (Cedar Valley, Hamilton, Cuboides); Wisconsin, Ontario, Manitoba, Missouri: Mississippian (Kinderhook); Missouri.

Ptyctodus compressus Eastman.

Hay, O. P. 1902 A, 323.
Cleland, H. F. 1911 A, 150, pl. xlviii, figs. 18-27.

Ptyctodus eastmani Weller.

Weller, S. 1906 A, 462, pl. i, figs. 31, 32.
Eastman, C. R. 1908 A, 137, 149.
Mississippian (Kinderhook); Missouri.

Ptyctodus ferox Eastman.

Hay, O. P. 1902 A, 323.
Branson, E. B. 1914 A, 63, pl. iv, figs. 3, 4.
1922 A, 42, 44, 127, 131, pl. xxi, fig. 12.
Cleland, H. F. 1911 A, 151, pl. xlix, figs. 35-40.
Eastman, C. R. 1907 B, 15, 16, 20, 72.
1908 A, 128, 135, 277, 286, figs. 20-22.
Hussakof and Bryant 1919 A, 116.
Norton, W. H. 1906 A, 356.
Teller, E. E. 1906 A, 164.
1911 A, 271.
Middle Devonian (Craghead); Missouri: (Hamilton); Wisconsin: (Cedar Valley); Iowa: Upper Devonian (State Quarry); Iowa: (Snyder Creek); Missouri.

Ptyctodus howlandi Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 112, pl. xxxviii; text-fig. 38.
Upper Devonian (Genesee); New York.

Ptyctodus punctatus Eastman.

Eastman, C. R. 1907 B, 13, 70, fig. 15.
Eastman, C. R. 1908 A, 133, 277, pl. iii, fig. 6.
Middle Devonian (Onondaga); New York, Ohio.

Ptyctodus sp. indet.

Eastman, C. R. 1907 B, 17. Upper Devonian (Portage); New York.
1908 A, 281. Upper Devonian (Portage); New York.
Udden, J. A. 1897 A, 95. Devonian (Hamilton); Iowa.

RHYNCHODUS Newb. Type *R. secans* Newb.

Hay, O. P. 1902 A, 323.
Bridge, T. W. 1904 A, 468.
Dean, B. 1906 B, 134, 150, fig. 118.
1912 A, 226.
Eastman, C. R. 1904 E, 295.
1906 D, 24.
1907 B, 67, 193, 234.
1908 A, 119, 120, 123.
1915 B, 440.
Garman, S. 1904 A, 246.
Hay, O. P. 1901 B, 68.
Huene, F. 1900 A, 65.
Hussakof and Bryant 1919 A, 107, 125.
Jaekel, O. 1901 A, 558-560 (Syn. of Ptyctodus).
1903 G, 389, 392 (Rynchodus).
1906 D, 180.
Jordan, D. S. 1923 A, 105.
Lambe, L. M. 1904 C, 16.
Weller, S. 1902 A, 427.
Zittel and Koken 1911 A, 83.
Zittel and Schlosser 1923 A, 44.
Zittel and Woodward 1902 A, 45.

Rhynchodus excavatus Newb.

Hay, O. P. 1902 A, 323 (R. excavatus, R. occidentalis).
Cleland, H. F. 1911 A, 148, pl. xlvii, fig. 4.
Eastman, C. R. 1907 B, 15, 16, 68.
1908 A, 124, 277, fig. 18.
1908 B, 68 (R. occidentalis a syn.).
Hussakof, L. 1908 A, 42.
Hussakof and Bryant 1919 A, 116.
Norton, W. H. 1906 A, 356 (R. occidentalis).
Teller, E. E. 1911 A, 271.
Udden, J. A. 1899 A, 302.
Middle Devonian (Hamilton); Wisconsin: (Cedar Valley); Iowa.

Rhynchodus ornatus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 117, pl. xxxix, figs. 1, 2.
Upper Devonian (Genesee); New York.

Rhynchodus pertenuis Eastman.

Eastman, C. R. 1904 E, 297, fig. 2.
Eastman, C. R. 1907 B, 20, 69, 234, pl. ii, fig. 5.
1908 A, 131, 287, fig. 19.
Upper Devonian (Chemung); New York.

Rhynchodus secans Newb.

Hay, O. P. 1902 A, 323.
Claypole, E. W. 1896 B, 354.
1903 A, 321.
Dean, B. 1906 B, 138, fig. 127.
Eastman, C. R. 1907 B, 13, 67.
1908 A, 123, 128, 277.
Hussakof, L. 1908 A, 42.
Newberry, J. S. 1874 H, 192.
Stauffer, C. R. 1909 A, 170.
Orton, E. 1878 A, 626.
Middle Devonian (Columbus and Delaware); Ohio.

Rhynchodus telleri Hussakof and Bryant.

Hussakoff and Bryant 1919 A, 15, 116, text-fig. 39.
Upper Devonian (Genesee); New York.

Rhynchodus sp. indet.

Hay, O. P. 1902 A, 323. Devonian; Manitoba.
Clarke and Luther 1904 A, 64 Devonian (Chemung); New York.
Cleland, H. F. 1911 A, 148, pl. xlvii, fig. 6.
Eastman, C. R. 1907 B, 15, 16, 21, 70. Devonian (Chemung); New York: (Cedar Valley); Iowa, Illinois.
1908 A, 132, 281. Devonian (Chemung, Naples); New York: 277, Devonian ("Cuboides"); Manitoba: 281, 287, Devonian (New Albany); Kentucky: 132, Mississippian (Waverly); Kentucky.
Hussakof, L. 1908 A, 42.
Lambe, L. M. 1904 C, 34. Devonian (Cuboides); Manitoba.
Teller, E. E. 1911 A, 271. Devonian (Hamilton); Wisconsin.
Tyrrell, J. B. 1892 A, 209. Upper Devonian; Manitoba.

DEINODUS Hussakof and Bryant. Type *D. bennetti* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 123.
Jordan, D. S. 1923 A, 105.

Deinodus bennetti Hussakof and Bryant.

Hussakof and Bryant 1919 A, 10, 123, pls. xlii, xliii.
Middle Devonian (Onondaga); New York.

PALÆOMYLUS Woodward. Type *Rhynchodus frangens* Newb.

Hay, O. P. 1902 A, 323.
Bridge, T. W. 1904 A, 468.
Dean, B. 1906 B, 134, fig. 117.
Eastman, C. R. 1904 E, 295.
1906 D, 24.
1907 B, 153, 193, 232.
1908 A, 119, 120.
Hay, O. P. 1901 B, 68.
Hussakof and Bryant 1919 A, 107.
Jaekel, O. 1903 G, 391.
Heller, E. E. 1906 A, 164, 167.
Weller, S. 1902 A, 427.
Woodward, A. S. 1898 B, 55.
Zittel and Koken 1911 A, 84.
Zittel and Schlosser 1923 A, 44.
Zittel and Woodward 1902 A, 45.

Palæomylus crassus (Newb.).

Hay, O. P. 1902 A, 323.
Claypole, E. W. 1896 B, 354 (Rhynchodus).
1903 A, 321 (Rhynchodus).
Dean, B. 1906 B, 139, fig. 129.
Eastman, C. R. 1907 B, 13.
1908 A, 128, 277.
Hussakof, L. 1908 A, 41.
Hussakof and Bryant 1919 A, 121, text-fig. 42.
Newberry, J. S. 1874 H, 192 (Rhynchodus).
Orton, E. 1878 A, 626 (Rhynchodus).
Stauffer, C. R. 1909 A, 170.
Middle Devonian (Columbus and Delaware); Ohio.

Palæomylus frangens (Newb.).

Hay, O. P. 1902 A. 323.
Claypole, E. W. 1896 B, 354 (Rhynchodus).
1903 A, 321 (Rhynchodus).
Eastman, C. R. 1907 B, 13.
1908 A, 277.
Hussakof, L. 1908 A, 41.
Hussakof and Bryant 1919 A, 121, text-fig. 42.
Newberry, J. S. 1874 H, 192 (Rhynchodus pangens).
Orton, E. 1878 A, 626 (Rhynchodus).
Stauffer, C. R. 1909 A, 170.
Middle Devonian (Columbus and Delaware); Ohio.

Palæomylus greenei (Newb.).

Hay, O. P. 1902 A, 323.
Cleland, H. F. 1911 A, 151, pl. I.
Dean, B. 1906 B, 139, fig. 128.
Eastman, C. R. 1907 B, 15, 153.
1908 A, 128, 277.
Hussakof, L. 1908 A, 42.
Hussakof and Bryant 1919 A, 119, text-fig. 40.
Sauvage, H. E. 1899 A, 5.
Teller, E. E. 1906 A, 167, pl. iv.
1911 A, 270.
Middle Devonian (Hamilton); Wisconsin.

Palæomylus lunaformis Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 119, pl. xl, figs. 4-6; text-figs. 41, 42.
Upper Devonian (Genesee); New York.

Palæomylus sp. indet.

Hussakof and Bryant 1919 A, 15, 122, pl. xli.
Upper Devonian (Genesee); New York.

COCCOSTEIDÆ Traquair.

Traquair, R. H. 1890 A, 20.
Hay, O. P. 1902 A, 344.
Abel, O. 1908 E, 422 ("coccosteiden").
1912 F, 440.
1919 A, 99.
Bridge, T. W. 1904 A, 536.
Eastman, C. R. 1901 C, 329 ("coccosteans").
1904 C, 143.
1906 D, 3.
1907 A, 226.
1907 B, 23, 113.
1908 A, 160, 184.
1917 A, 237.
Goodrich, E. S. 1909 A, 263.
Gregory, W. K. 1907 D, 447.
Hussakof, L. 1906 A, 139 ("coccosteids").
Jaekel, O. 1919 A, 75, 81, 87, fig. 3 ("coccostei").
1926 A, 174, 181 ("coccosteiden").
Jordan, D. S. 1923 A, 88.
Kiaer, J. 1924 A, 116, 117.
Lütken, C. 1871 A, 294 ("coccostées").
Marinelli, W. 1925 A, 169.
Regan, C. T. 1904 A, 340.
Schlosser, M. 1917 A, 133 ("coccosteiden").
Steinmann, G. 1907 A, 419.
Stensiö, E. A. 1925 B. 164 ("coccosteids").
Zittel and Koken 1911 A, 80.
Zittel and Schlosser 1923 A, 41.
Zittel and Woodward 1902 A, 58.

COCCOSTEINÆ Hay.

Hay, O. P. 1902 A, 344.
Abel, O. 1912 F, 596 ("coccosteiden").
Dean, B. 1901 C, 120, 122 (Coccosteidæ).
Gebhardt, F. A. M. W. 1907 A, 73 ("coccosteiden").
Jaekel, O. 1901 A, 558 ("coccosteiden").
1902 A, 106 ("coccosteiden").
1903 D, 41, 58 ("coccosteiden").
1903 E, 86 ("coccosteiden").
1903 F, 39 ("coccosteiden").
Jaekel, O. 1903 G, 390 ("coccosteiden").
1904 A, 33 ("coccosteiden").
1906 B, 80 ("coccosteiden").
1906 D, 183 ("coccosteiden").
1907 A, 171 ("coccosteiden").
Jordan, D. S. 1905 A, i, 586; ii, 564 (Coccosteidæ).
1907 B, 760 (Coccosteidæ).
Lütken, C. 1868 C (Coccostei).

Coccosteus Agassiz. Type *C. decipiens* Agassiz.

Hay, O. P. 1902 A, 344.
Abel, O. 1907 D, (159).
1908 E, 410.
1912 F, 439, 596, fig. 323.
1919 A, 93, 99, figs. 53, 56, 58.
1920 A, 324, fig. 514.
1921 A, 160, fig. 24.
Adams, L. A. 1919 A, 122, fig. 3.
Allis, E. P. 1898 A, 443.
Allis, E. P. 1905 A, 492.
Arldt, T. 1923 A, 482.
Barkas, W. J. 1874 D, 549.
Bridge, T. W. 1904 A, 536, 736.
Bronn, H. G. 1848 A, 317.
1849 A, 656.
Claypole, E. W. 1896 B, 350 et seq.
1900 A, 246.
1903 A, 313, 316.

Coulon, L. 1903 A, 135.
Dean, B. 1893 E, 187.
1900 A, 3, 12, 21, 24.
1901 A, 87.
1901 C, 123.
1904 D, 64.
1907 A, 48.
1908 A, 202.
1909 C, 274, figs. 62-65.
Dean, Gudger, Henn 1923 A, 664.
Deecke, W. 1913 A, 88.
Delafontaine, M. 1877 A, 267.
Eastman, C. R. 1898 E, 183.
1900 G, 287.
1904 C, 143.
1905 A, 41, fig. 4.
1906 A, 141.
1906 D, 1.
1907 B, 115, 119, 193, Coccosteus; 144 (Protitanichthys, type D. fossatus).
1908 A, 186, 188 (Coccosteus); 201 (Protitanichthys).
Frassetto, F. 1915 A, fig. 5.
Frech, F. 1897 A, 123.
Gaudry, A. 1893 A, 120, fig. 97.
Gebhardt, F. A. M. W. 1907 A, 85.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1904 A, 494.
1909 A, 508, figs.
Heilprin, A. 1887 A, 149, 301.
Hennig, E. 1920 B, 113.
Hoernes, R. 1886 A, 547.
Hussakof, L. 1906 A, 120, figs. 12, 13, 19.
1908 C, 311 (Protitanichthys).
1909 B, 264.
1912 B, 127.
Huxley, T. H. 1858 D, 505, 515.
1861 D, 449.
Jaekel, O. 1903 B, 12.
1903 D, 52, fig. 6.
1906 A, 11, fig. 6.
1906 B, 80, fig. 10.
1906 D, 185, fig. 7.
1907 A, 171, fig. 1.
1908 C, 426, figs. 1, 2.
1911 A, 47, figs. 33, 34.
1919 A, 75, 87, 100, figs. 10, 14.
1927 B, 332.
Kemna, A. 1904 A, 75.
Kingsley, J. S. 1925 A, 117, fig. 124.
Koenen, A. 1876 A, 667.
1890 B, 198.
Koken, E. 1893 B, 175.
Koschkaroff, D. N. 1906 A, 298.
Lankester, E. R. 1864 D, 292.
1905 A, 256, fig. 185.
Mantell, G. A. 1844 A, 647, fig. 135.
Miller, H. 1851 A, 92.
Miller, J. 1869 A, 384.
Moodie, R. L. 1920 D, 14.
1923 B, 292.
1926 A, 82, 83, pls. vii, ix, text-figs. 1, 5.
Murchison, R. I. 1841 A, 99.
1854 A, 252, fig. 48.
Osborn, H. F. 1902 H, 749.
1905 N, 235.
1916 E, 606, fig. 14.
1917 B, 170, fig.
Owen, R. 1866 A, 196, 247.
Patten, W. 1912 A, 388.
Pompeckj, J. F. 1913 A, 1116, fig. 13.
Regan, C. T. 1904 A, 340, figs. 3, 4.
Schuchert, C. 1915 A, 686, fig. 408.
Sollas and Sollas 1903 A, 271.
Smith, B. 1909 B, 594.
Steinmann, G. 1907 A, 419, fig. 742.
Stensiö, E. A. 1925 B, 147, 170, figs. 23, 24*a*, 25.
Traquair, R. H. 1890 H, 483.
1903 A, 733.
Watson and Day 1916 A, 28.
Weller, S. 1902 A, 427.
Woodward, A. S. 1915 B, lxx.
1922 B, 30, fig. 4.
1922 C, 79, fig. 82.
Woodward, H. 1878 A, 16, pl. ii, fig. 1.
Zittel and Koken 1911 A, 81, fig. 138.
Zittel and Schlosser 1923 A, 41, figs. 50-52.
Zittel and Woodward 1902 A, 59.

Coccosteus canadensis Woodward.

Hay, O. P. 1902 A, 344.
Clarke, J. M. 1913 A, 113.
Eastman, C. R. 1907 B, 17, 115.
1908 A, 280.
Hussakof, L. 1912 B, 127, pl. i, text-fig. 1.
Hussakof and Bryant 1919 A, 26, pl. v, figs. 1-3.
Lambe, L. M. 1904 C, 17, 34, 42.
Traquair, R. H. 1903 A, 733.
Whiteaves, J. F. 1907 B, 251.
Upper Devonian (Scaumenac); Quebec.

Coccosteus cuyahogæ Claypole.

Hay, O. P. 1902 A, 344.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 18.
1908 A, 283.
Woodward, A. S. 1922 B, 35.
Upper Devonian (Cleveland); Ohio.

Coccosteus fossatus (Eastman).

Eastman, C. R. 1907 B, 14, 144, 233, pl. x, fig. 2; text-fig. 30 (Protitanichthys, type).
Eastman, C. R. 1908 A, 201, 278, fig. 30 (Protitanichthys.
Hussakof, L. 1908 C, 311 (Protitanichthys).
1909 B, 270, pl. xlv, text-fig. 7.
Stauffer, C. R. 1909 A, 170 (Protitanichthys).
Middle Devonian (Delaware); Ohio.

Coccosteus macromus Cope.

Hay, O. P. 1902 A, 344.
Eastman, C. R. 1907 B, 21, 116.
1908 A, 186, 287.
Hussakof, L. 1908 A, 6.
Upper Devonian (Chemung); Pennsylvania.

Coccosteus occidentalis Newb.

Hay, O. P. 1902 A, 344.
Claypole, E. W. 1896 B, 354.
1903 A, 320.
Eastman, C. R. 1907 B, 14, 115, 145, pl. ix, fig. 3.
1908 A, 186, 278.
Hussakof, L. 1906 A, 137, fig. 22.
1908 A, 6.
1909 B, 272, fig. 8.

Moodie, R. L. 1926 A, 66.
Newberry, J. S. 1889 A, 52, pl. xxx, figs. 2, 2a.
Orton, E. 1878 A, 625.
Stauffer, C. R. 1909 A, 169.
Traquair, R. H. 1903 A, 733.
Middle Devonian (Delaware); Ohio, New York?.

Coccosteus parvulus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 19, 29, pl. iv, figs. 1-3; pl. lxx, fig. 1.
Upper Devonian (Portage); New York.

Coccosteus sp. indet.

Cross, W. 1905 C, 4. Devonian (Elbert); Colorado.
Cockerell, T. D. A. 1913 A, 246. Ordovician?; Colorado.
Eastman, C. R. 1907 B, 14, 115, pl. i, fig. 9. Devonian (Onondago); New York.
1908 A, 278.
Hussakof and Bryant 1919 A, 19. Upper Devonian (Portage); New York.

LISPOGNATHUS Miller. Type *L. spatulatus* (Newb.).

Miller, S. A. 1892 A, 716.
Hay, O. P. 1902 A, 345 (Liognathus; preoccupied).
Dean, B. 1901 C, 120 (Liognathus).
Jordan, D. S. 1920 C, 458.

Lispognathus spatulatus (Newb.).

Hay, O. P. 1902 A, 345 (Liognathus).
Claypole, E. W. 1903 A, 320 (Liognathus).
Eastman, C. R. 1907 B, 14, 145 (Liognathus).
1908 A, 186 (Liognathus); 278 (Coccosteus).
Hussakof, L. 1906 A, 140, fig. 21 (Liognathus, Coccosteus).
1908 A, 15 (Liognathus).
1908 C, 312 (Liognathus).
Orton, E. 1878 A, 626 (Liognathus).
Stauffer, C. R. 1909 A, 169 (Coccosteus).
Middle Devonian (Delaware); Ohio.

ASPIDICHTHYS Newb. Type *A. clavatus* (Newb.).

Hay, O. P. 1902 A, 345.
Arldt, T. 1923 A, 482.
Hussakof and Bryant 1919 A, 92.
Jaekel, O. 1927 B, 334.
Jordan, D. S. 1919 B, 371.
Pompeckj, J. F. 1913 A, 1119.
Woodward, A. S. 1891 A, 311.
Zittel and Schlosser 1923 A, 44.
A genus of uncertain systematic position.

Aspidichthys clavatus Newb.

Hay, O. P. 1902 A, 345.
Claypole, E. W. 1896 B, 353.
1903 A, 321.
Eastman, C. R. 1907 B, 19, 156.
1908 A, 206, 285.
Hussakof, L. 1908 A, 22.
1919 A, 92.
Newberry, J. S. 1873 G, 157.
Woodward, A. S. 1891 A, 311.
Upper Devonian (Huron shale); Ohio: (Portage); New York?.

Aspidichthys? notabilis Whiteaves.

Hay, O. P. 1902 A, 345.
Eastman, C. R. 1907 B, 16.
1908 A, 279.
Hussakof and Bryant 1919 A, 13, 17, 91, pls. xxv, xxvi.
Lambe, L. M. 1904 C, 17, 34, 42.
Tyrrell, J. B. 1892 A, 209.
Upper Devonian (Genesee); New York: Middle Devonian (Hamilton); Ontario: Devonian (Cuboides); Manitoba.

Aspidichthys? sp. indet.

Eastman, C. R. 1907 B, 15. Devonian (Hamilton); New York.
1908 A, 282. Devonian (New Albany); Kentucky.
Kiaer, J. 1915 A, 38, pl. ii, figs. 3-4 ("coccosteomorph fish." This genus?) Upper Devonian?, Ellesmere Land.

PHLYCTÆNASPINÆ, new name.

Stensiö, E. A. 1925 B, 165 ("phlyctænaspids").

PHLYCTÆNASPIS Traquair. Type *Coccosteus acadicus* Whiteaves.

Hay, O. P. 1902 A, 345.
Arldt, T. 1923 A, 482.
Chapman, F. 1916 A, 212.
Dean, B. 1901 C, 120.
1904 D, 64 (Phlyctænius).
Dean, Gudger, Henn 1923 A, 665.
Eastman, C. R. 1906 D, 17.
1907 B, 115, 117.
Gebhardt, F. A. M. W. 1907 A, 86.
Goodrich, E. S. 1909 A, 260.
Hussakof, L. 1906 A, 132, fig. 17.
Jaekel, O. 1903 D, 53, 58.
1907 A, 185.
Jaekel, O. 1919 A, 75.
1926 A, 182.
1927 B, 332.
Jordan, D. S. 1903 A, 136.
1920 C, 453.
Pompeckj, J. F. 1913 A, 1118, 1119.
Stensiö, E. A. 1925 B, 165.
Whiteaves, J. F. 1907 B, 261.
Woodward, A. S. 1915 B, lxx.
1917 G, lxxx.
Zittel and Schlosser 1923 A, 42.
Zittel and Woodward 1902 A, 59.

Phlyctænaspis acadica (Whiteaves).

Hay, O. P. 1902 A, 345.
Chapman, F. 1916 A, 212, pl. xxi, fig. 6.
Eastman, C. R. 1907 B, 13.
1908 A, 188, 276.
Hussakof, L. 1906 A, 137.
Jaekel, O. 1895 C, 162.
Lambe, L. M. 1904 C, 16, 34, 42.
1912 A, 4.
Stensiö E. A. 1925 B, 165, figs. 20, 21.
Whiteaves, J. F. 1907 B, 265, pl. iv, figs. 1-4.
Lower Devonian; New Brunswick.

DINICHTHYINÆ Eastman.

Hay, O. P. 1902 A, 345.
Claypole, E. W. 1893 H, 22 ("palæozoic fishes").
Dames, W. 1898 E, 527, 529.
Dean, B. 1901 C, 120, 122 (Dinichthyidæ, Titanichthyidæ).
1911 B, 302 ("placoderms).
Eastman, C. R. 1907 A, 228 ("dinichthyids").
1909 B, 997 ("dinichthyids").
Goodrich, E. S. 1909 A, 263 (Dinichthyidæ, Titanichthyidæ).
Gregory, W. K. 1907 D, 447 (Dinichthyidæ; Trachosteidæ).
Hussakof, L. 1906 A, 140 ("dinichthyids").
Jaekel, O. 1903 D, 58 ("dinichthyiden").
1919 A, 76 ("dinichthyiden").
Jordan, D. S. 1905 A, i, 587 (Dinichthyidæ, Titanichthyidæ).
1907 B, 760 (Dinichthyidæ, Titanichthyidæ).
1923 A, 88 ("Dinichthyidæ, Titanichthyidæ).
Prosser, C. S. 1913 A, 349, 353 ("fossil-fishes").
Woodward, A. S. 1904 C, 190 ("dinichthyid fishes").

HUSSAKOFIA Cossmann. Type *Dinichthys minor* Newb.

Cossmann, M. 1910, Rev. crit. Paléozool., XIV, 74.
Hussakof, L. 1909 B, 263 (Brachygnathus, preoccupied).
Zittel and Schlosser 1923 A, 43 (Brachygnathus).

Hussakofia minor (Newb.).

Hay, O. P. 1902 A, 347 (Dinichthys).
Claypole, E. W. 1903 A, 320, 322 (Dinichthys).
Eastman, C. R. 1907 B, 19 (Dinichthys).
1908 A, 284 (Dinichthys).
Hussakof, L. 1906 A, 130, fig. 13 (Dinichthys).
1908 A, 12 (Dinichthys).
1909 B, 266, figs. 1-3 (Brachygnathus).
Smith, B. 1909 B, 593 (Dinichthys).
Upper Devonian (Cleveland shale); Ohio.

DINICHTHYS Newb. Type *D. hertzeri* Newb.

Hay, O. P. 1902 A, 345.
Abel, O. 1912 F, 487.
Adams, L. A. 1919 A, 123, pl. xi.
Allis, E. P. 1905 A, 492.
Anonymous, 1916 A, 140.
Arldt, T. 1923 A, 482.
Barkas, W. J. 1874 D, 550.
Branson, E. B. 1922 A, 6.
Bridge, T. W. 1904 A, 537.
Clark, W. 1898 A, 46, figs.
Dames, W. 1898 E, 528.
Claypole, E. W. 1896 B (Dinichthys, Gorgonichthys).
1903 A, 316 (Gorgonichthys).
Dean, B. 1893 E, 187.
1900 A, 26.
1900 B, 10.
1901 C, 111, 120, 123 (Dinichthys); 120 (Gorgonichthys?).
1907 A, 47, 48.
1908 A, 202.
1909 C, 277, figs. 58-61.
1923 A, 608.
Dean, Gudger, Henn 1923 A, 677.
Deecke, W. 1913 A, 89.
Delafontaine, M. 1877 A, 266.
Dollo, L. 1907 B, 107.
Eastman, C. R. 1905 A, 42.
1906 A, 132, 134.
1906 D, 1.
1907 A, 211.
1907 B, 96, 118, 193, 225.
1908 A, 188.
1909 C, 262.
1917 A, 249.
Gaudry, A. 1896 A, 59.
Gill, T. 1879 A, 7.
Gregory, W. K. 1914 E, 526.
1915 D, 324.
Heilprin, A. 1887 A, 149, 302.
Hennig, E. 1920 B, 113.
Huene, F. 1900 A, 64.
Hussakof, L. 1905 A, 27.
1906 A, 107, figs. 1, 2, 8, 9.
1909 B, 264.
1911 B, 126.
Jaekel, O. 1902 A, 112.
1907 A, 181.
1919 A, 75, fig. 6.
1927 B, 332.
Kayser, E. 1880 A, 819.
Kemna, A. 1903 A, 353.
1904 A, 77 (Dinichthys, Gorgonichthys).
Kingsley, J. S. 1925 A, 117.
Lankester, E. R. 1905 A, 257, fig. 185.
Moodie, R. L. 1920 C, 48, pl. i, figs. A, B.
1926 A, 66, 81, 83, pl. viii, text-figs. 1-4, 6.
Newberry, J. S. 1873 G, 157.
Norton, W. H. 1906 A, 357.
Orton, E. 1878 A, 635.
Osborn, H. F. 1902 H, 749.
1905 N, 235.
1917 B, 175.
Pompeckj, J. F. 1913 A, 1116.
Rogers, A. F. 1924 A, 548, pl. xxv, fig. 3.
St. John, O. 1902 A, 654.
Sauvage, H. E. 1899 A, 4.
1899 B, 86.
Schlosser, M. 1917 A, 133, 146.
Sharp, K. D. 1903 A, 263.
Smith, B. 1909 B, 588.
Stensiö, E. A. 1925 B, 170, fig. 23.

Teller, E. E. 1906 A, 167.
Traquair, R. H. 1880 A, 159.
Weller, S. 1902 A, 427.
Woodward, A. S. 1890 F, 147.
1915 B, lxx.
1922 B, 33, 35.
1922 C, 80.
Woodward, H. 1878 A, 16.
Wright, A. A. 1897 A, 59.
Zittel and Koken 1911 A, 82.
Zittel and Schlosser 1923 A, 42.
Zittel and Woodward 1902 A, 59.

Dinichthys armstrongi Hussakof and Bryant.

Hussakof and Bryant 1919 A, 54, pl. lxx, fig. 3 ("D. sp.," D. armstrongi).
Upper Devonian (Chemung); New York.

Dinichthys canadensis Whiteaves.

Hay, O. P. 1902 A, 346.
Claypole, E. W. 1903 A, 320, 322.
Eastman, C. R. 1907 B, 15.
1908 A, 279.
Hussakof, L. 1906 A, 137.
Kindle, E. M. 1914 B, 255.
Lambe, L. M. 1904 C, 17, 34, 42.
Tyrrell, J. B. 1892 A, 209.
Devonian ("Cuboides"); Manitoba.

Dinichthys clarki (Claypole).

Hay, O. P. 1902 A, 346.
Claypole, E. W. 1896 B, 350, et seq. (Gorgonichthys).
1903 A, 320 (Gorgonichthys).
Eastman, C. R. 1900 B, 35.
1907 B, 19.
1908 A, 284.
Gaudry, A. 1896 A, 59 (Gorgonichthys).
Hussakof, L. 1905 B, 412, 414, pl. xv, fig. 2; pl. xvii.
1908 A, 7.
Hyde, J. E. 1926 A, 497 (D. clarkii).
Upper Devonian (Cleveland); Ohio.

Dinichthys curtus Newb.

Hay, O. P. 1902 A, 346.
Adams, L. A. 1919 A, 122, fig. 4.
Branson, E. B. 1908 C, 368.
Claypole, E. W. 1903 A, 320, 322.
Eastman, C. R. 1907 B, 19, 21, 138, 228.
1908 A, 200, 284, 287.
Hussakof, L. 1905 B, 409; pl. xv, fig. 1; pl. xvi; text-figs. 1, 2.
1906 A, 110, pl. xii; text-fig. 5.
1908 A, 7.
Upper Devonian (Cleveland); Ohio: (Chemung); Pennsylvania.

Dinichthys halmodeus (Clarke).

Hay, O. P. 1902 A, 346.
Abel, O. 1919 A, 96, fig. 56.
Clarke and Ruedemann 1903 A, 766.
Eastman, C. R. 1907 B, 15, 126, 228, pl. ii, fig. 7; pl. x, fig. 1; text-fig. 24.
1908 A, 191, 278, fig. 27.
1917 A, 249, fig. 4.
Hussakof, L. 1906 A, 137, 140, 146, figs. 22, 24.
1908 C, 312
1912 B, 131.
Smith, B. 1909 B, 589, figs. 1-3.
1910 A, 658, fig. 2.
Stensiö, E. A. 1925 B, 175, fig. 24*b*.
Middle Devonian (Marcellus); New York.

Dinichthys hertzeri Newb.

Hay, O. P. 1902 A, 346.
Abel, O. 1912 F, 487.
1919 A, 102, fig. 61.
Baird, S. F. 1876 A, cc (D. herzeri).
Claypole, E. W. 1896 B, 353.
1903 A, 315, 320, 322.
Eastman, C. R. 1902 D, 655 (D. herzeri).
1907 B, 19, 228 (D. herzeri).
1908 A, 283 (D. herzeri).
Hussakof, L. 1905 B, 414.
1906 A, 118, pl. xiii, figs. 1-4; text-figs. 3, 11, 25.
1908 A, 10.
Hyde, J. E. 1926 A, 497 (D. herzeri).
Jaekel, O. 1919 A, 80, fig. 6.
Newberry, J. S. 1870 E, 20.
1873 G, 157.
1874 H, 189.
Prosser, C. S. 1913 A, 327 (D. herzeri).
St. John, O. 1902 A, 655.
Weller, S. 1926 A, 496, fig. (D. herzeri).
Woodward, H. 1878 A, 16, fig. 14.
Zittel and Koken 1911 A, 81, figs. 143, 144.
Zittel and Schlosser 1923 A, 43, fig. 55.
Zittel and Woodward 1902 A, 60, fig. 112.
Upper Devonian (Huron); Ohio, Kentucky: (Cleveland?); Ohio.

Dinichthys insolitus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 53, pl. xxvii, fig. 3.
Upper Devonian (Genesee); New York.

Dinichthys intermedius Newb.

Hay, O. P. 1902 A, 346.
Abel, O. 1912 F, 487, fig. 370.
1919 A, 101, fig. 60.
Adams, L. A. 1919 A, 125, figs. 4, 5.
Anonymous 1916 A, 140.
Branson, E. B. 1908 B, 94.
1908 C, 366.
1909 A, 197.
Claypole, E. W. 1896 B, 351.
1903 A, 316, 320, 322.
Dames, W. 1898 E, 528, fig. 1.
Eastman, C. R. 1907 B, 19, 228, fig. 23.
1908 A, 195, 284.
Hussakof, L. 1903 A, 27, pl. v; text-figs. 1, 2.
1905 B, 411.
1906 A, 118, pl. xiii, fig. 5, text-figs. 4, 6, 10, 13, 19, 20, 24.
1908 A, 10.
Hussakof and Bryant 1919 A, 19, 33, figs. 5, 6 (This species?).
Jaekel, O. 1919 A, 80, 89, figs. 6, 10.
Jordan, D. S. 1907 B, 245, fig. 183.
Kemna, A. 1904 A, 68.

Kingsley, J. S. 1925 A, 117, fig. 123.
Koken, E. 1893 B, 172.
Moodie, R. L. 1926 A, 80.
Osborn, H. F. 1916 E, 604, fig. 12.
Pompeckj, J. F. 1913 A, 1117, fig. 15.
Smith, B. 1910 A, 661.
Stensiö, E. A. 1925 B, 174.
Woodward, A. S. 1922 B, 32, 34, figs. 4, 5.
1922 C, 80, fig. 83.
Zittel and Koken 1911 A, 81, figs. 142, 147.
Zittel and Schlosser 1923 A, 43, fig. 56.
Upper Devonian (Cleveland); Ohio.

Dinichthys kepleri Claypole.

Claypole, E. W. 1897 B, 322, pl. xx.
Eastman, C. R. 1908 A, 284 (Syn.? of D. hertzeri).
Upper Devonian (Cleveland); Ohio.

Dinichthys lincolni Claypole.

Hay, O. P. 1902 A, 347.
Clarke and Ruedemann 1903 A, 766.
Claypole, E. W. 1903 A, 314, 320, 322.
Dean, B. 1901 C, 112.
Eastman, C. R. 1907 B, 15, 129, 228, pl. vii, figs. 4-6.
1908 A, 193, 278, pl. ii, fig. 20.
Hussakof, L. 1906 A, 115, 117, 142.
Jaekel, O. 1919 A, 92, fig. 11.
Smith, B. 1909 B, 595.
Middle Devonian (Marcellus); New York.

Dinichthys magnificus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 17, 36, pls. i, vii-ix; pl. xvii, fig. 3; pl. xxxii, fig. 1; text-figs. 7-9, 11, 12.
Bryant, W. L. 1916 A, 9 pl.
Upper Devonian (Genesee, Portage); New York.

Dinichthys missouriensis Branson.

Branson, E. B. 1914 A, 61, pl. ii, figs. 1, 2, 4.
Eastman, C. R. 1917 A, 248.
Upper Devonian; Missouri.

Dinichthys newberryi Clarke.

Hay, O. P. 1902 A, 347.
Abel, O. 1919 A, 96, fig. 56.
Clarke and Luther 1904 A, 59.
Clarke and Ruedemann 1903 A, 766.
Claypole, E. W. 1903 A, 320, 322.
Dames, W. 1898 E, 528, fig. 2 (This species?).
Eastman, C. R. 1907 B, 17, 133, 228, pl. vi, fig. 2.
1908 A, 198, 281.
1917 A, 248.
Hussakof, L. 1903 A, 35.
Hussakof and Bryant 1919 A, 13, 17, 45, pls. x, xi; text-figs. 13, 14.
Merrill, G. P. 1907 A, 10.
Smith, B. 1909 B, 593 (This species?).
Upper Devonian (Genesee, Portage?); New York: (New Albany); Kentucky.

Dinichthys præmaxillaris Hay.

Hay, O. P. 1902 A, 347.
Claypole, E. W. 1897 B, 323 (D. clarki).
Claypole, E. W. 1903 A, 320, 322 (D. clarki).
Eastman, C. R. 1908 A, 284 ("D. clarki").
Upper Devonian (Cleveland); Ohio.

Dinichthys precursor Newb.

Hay, O. P. 1902 A, 347.
Claypole, E. W. 1896 B, 354 (D.? præcursor).
1903 A, 320, 322 (D.? præcursor).
Eastman, C. R. 1907 B, 14.
1908 A, 278.
Hussakof, L. 1903 A, 35.
1906 A, 137.
1908 A, 12.
Stauffer, C. R. 1909 A, 169.
Middle Devonian (Columbus); Ohio.

Dinichthys prentis-clarki Claypole.

Hay, O. P. 1902 A, 347.
Eastman, C. R. 1907 B, 19.
1908 A, 284 (Syn.? of D. gouldi).
Hussakof, L. 1906 A, 146.
Kemna, A. 1904 A, 68.
Upper Devonian (Cleveland); Ohio.

Dinichthys pustulosus Eastman.

Hay, O. P. 1902 A, 347.
Branson, E. B. 1922 A, 22, 127, pl. xxxi, figs. 7, 8.
Cleland, H. F. 1911 A, 155, pl. xlv, figs. 1, 2, pl. xvi; text-fig. 4.
Dames, W. 1898 E, 530.
Dean, B. 1901 C, 122.
Eastman, C. R. 1902 D, 653, figs. 1, 2.
1906 A, 140, fig. 3.
1906 D, 12, fig. A.
1907 B, 15, 16, 17, 20, 130, 228, pl. ii, fig. 6; pl. v, figs. 2, 3; pl. xii; text-fig. 25.
1908 A, 49, 194, 278, 281, 286, pl. i, fig. 10; pl. iv; text-fig. 28.
1917 A, 248, pl. viii, fig. 8.
Hussakof, L. 1906 A, 137, 142, fig. 22.
1926 A, 245.
Hussakof and Bryant 1919 A, 13, 17, 50, pl. xii; pl. xiii, figs. 1, 2.
Norton, W. H. 1906 A, 356.
St. John O. 1902 A, 656, fig. 1 ("dinichthys").
Sauvage, H. E. 1899 B, 86.
Sauvage and Udden 1922 A, 138.
Teller, E. E. 1911 A, 270.
Upper Devonian (Genesee); New York: (State Quarry); Iowa: (New Albany); Kentucky: (Seneca); New York.
Middle Devonian (Hamilton); Wisconsin: (Cedar Valley); Iowa, Illinois: (Mineola); Missouri.

Dinichthys rowleyi Branson.

Branson, E. B. 1914 A, 60, pl. i, figs. 1, 2, 4-6; pl. iii, figs. 1, 2, 6.
Upper Devonian; Missouri.

Dinichthys subgracilis Branson.

Branson, E. B. 1911 B, 24, 29, pl. ii.
Upper Devonian (Ohio shales); Ohio.

Dinichthys tenuidens Hussakof and Bryant.

Hussakof and Bryant 1919 A, 19, 55, pl. lxix, fig. 2. Upper Devonian (Portage); New York.

Dinichthys terrelli Newb.

Hay, O. P. 1902 A, 347.
Baird, S. F. 1876 A, cc.
Branson, E. B. 1908 C, 363, figs. 1, 2.
1911 B, 30, pl. iii.
Claypole, E. W. 1896 B, 351.
1897 B, 323.
1903 A, 316, 320, 322.
Dean, B. 1909 C, 268, pls. xxxviii, xxxix.
1911 A, 801
Eastman, C. R. 1902 D, 655.
1906 D, 14, fig. C.
1907 B, 19, 228.
1908 A, 195, 284.
1917 A, 248.
Gaudry, A. 1896 A, 109, fig. 89.
Hussakof, L. 1905 B, 414.
1906 A, 118, figs. 20, 22, 24, 25.
1908 A, 12.
Hussakof and Bryant 1919 A, 32, pl. vi, figs. 1-3; text-fig. 10.
Hyde, J. E. 1926 A, 497.
Kemna, A. 1904 A, 68.
Newberry, J. S. 1874 H, 189, 214.
1889 A, *passim*, pl. iv, figs. 1, 2; pl. v, figs. 1-3; pl. vi, pl. vii, figs. 1, 2; pl. xxxii, fig. 1; pl. xxxiii, pl. xliii, fig. 2; pl. xlviii; figs. 1, 2; pl. 1.
St. John, O. 1902 A, 655.
Weller, S. 1926 A, 496, fig.
Upper Devonian (Cleveland and Ohio shales); Ohio.

Dinichthys tuberculatus Newb.

Hay, O. P. 1902 A, 347.
Arldt, T. 1923 A, 482.
Claypole, E. W. 1903 A, 320, 322.
Cleland, H. F. 1911 A, 156.
Dames, W. 1898 D, 529.
Eastman, C. R. 1907 B, 15, 16, 21, 137, 228.
1908 A, 199, 279, 286, 288.
1917 A, 249, pl. ii, fig. 1.
Hussakof, L. 1906 A, 150.
1908 A, 14.
Upper and Middle Devonian (State Quarry?) and (Cedar Valley); Iowa: (Hamilton); Wisconsin: (New Albany); Kentucky: (Chemung); Pennsylvania: (Corniferous?); Ohio: Devonian; Belgium.

Dinichthys sp. indet.

Hay, O. P. 1902 A, 347. Devonian (Catskill); New York.
Branson, E. B. 1914 A, 63, pl. i, fig. 3; pl. iii, figs. 2, 5-7. Devonian; Missouri.
Eastman, C. R. 1907 B, 16, 17, 139; pl. vi, fig. 1 (Various specimens; Wisconsin, New York).
1908 A, 282, 289, Devonian (Portage and Catskill 2 sp.?); New York.
Hussakof, L. 1908 A, 14, 21 (Third genus?) Upper Devonian (Cleveland); Ohio.
Hussakof and Bryant 1919 A, 19, 56, text-figs. 18-19. Upper Devonian (Portage); New York: 13, 60, Upper Devonian (Genesee); New York.

PERISSOGNATHUS Hussakof and Bryant. Type *P. aduncus* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 81.
The family position of this genus is doubtful.

Perissognathus aduncus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 10, 81, pl. xx, figs. 1-1*b*; pl. xxvii, figs. 4, 4*a*. Upper Devonian (Genesee); New York.

STENOGNATHUS Newb. Type *Dinichthys corrugatus* Newb.

Hay, O. P. 1902 A, 348.
Dean, B. 1901 C, 120.

Stenognathus corrugatus Newb.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1903 A, 320, 322 (Dinichthys).
Eastman, C. R. 1907 B, 19.
1908 A, 285.
Hussakof, L. 1908 A, 17.
1909 B, 267, fig. 4.
1911 B, 126.
Hussakof and Bryant 1919 A, 68.
Upper Devonian (Cleveland); Ohio.

Stenognathus denticulatus Hussakof and Bryant.

Hussakof and Bryant. 1919 A, 13, 71, text-fig. 23.
Upper Devonian (Genesee); New York.

Stenognathus dolichocephalus (Eastman).

Eastman, C. R. 1907 B, 17, 135, 228, pl. v, fig. 1 (Dinichthys).
Eastman, C. R. 1908 A, 281 (Dinichthys).
Hussakof, L. 1908 C, 311 (Dinichthys).
Hussakof and Bryant 1919 A, 66, text-figs. 21, 22.
Upper Devonian (Portage); New York.

Stenognathus gouldii (Newb.).

Hay, O. P. 1902 A, 346 (Dinichthys).
Claypole, E. W. 1903 A, 320, 322 (Dinichthys gouldi).
Dean, B. 1909 C, 272 (Dinichthys).
Eastman, C. R. 1907 B, 19 (Dinichthys).
1908 A, 284 (Dinichthys).
Hussakof, L. 1906 A, 146 (Syn. of Dinichthys prentis-clarki).
1908 A, 8, fig. 1 (Dinichthys).
1911 B, 126, pl. viii, fig. 5; text-fig. 6.

Hussakof and Bryant 1919 A, 68, 71, pl. xv, fig. 1.
Hyde, J. E. 1926 A, 498.
Stensiö, E. A. 1925 B, 179 (Dinichthys).
Upper Devonian (Cleveland); Ohio: (Genesee); New York.

Stenognathus gracilis (Claypole).

Hay, O. P. 1902 A, 346 (Dinichthys).
Adams, L. A. 1919 A, 125, fig. 4 (Stenognathus).
Claypole, E. W. 1903 A, 320, 322 (Dinichthys).
Eastman, C. R. 1907 B, 19 (Dinichthys).
1908 A, 284 (Dinichthys).
Hussakof, L. 1911 B, 126 (Dinichthys).
Upper Devonian (Cleveland); Ohio.

Stenognathus insignis Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 73, pl. xxi, fig. 2; text-fig. 24; 78 (This species?). Upper Devonian (Genesee); New York.

Stenognathus mixeri Hussakof and Bryant.

Hussakof and Bryant 1919 A, 19, 75, text-fig. 25. Upper Devonian (Portage); New York.

Stenognathus ringuebergi (Newberry).

Hay, O. P. 1902 A, 347 (Dinichthys).
Claypole, E. W. 1903 A, 320, 322 (Dinichthys).
Eastman, C. R. 1907 B, 17, 134 (Dinichthys).
1908 A, 281 (Dinichthys).
Hussakof and Bryant 1919 A, 19, 68, pl. xi, fig. 2, pl. lxix, fig. 1.
Upper Devonian (Portage); New York.

MACHÆROGNATHUS Hussakof and Bryant. Type *M. woodwardi* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 83.
The family position of this genus is doubtful.

Machærognathus woodwardi Hussakof and Bryant.

Hussakof and Bryant 1919 A, 10, 83, pl. xxi, figs. 1*a*, 1*b*; text-fig. 27. Upper Devonian (Genesee); New York.

TITANICHTHYS Newberry. Type *T. agassizii* Newb.

Hay, O. P. 1902 A, 348 (Titanichthys, Brontichthys).
Abel, O. 1912 F, 487.
Allis, E. P. 1905 A, 492.
Bridge, T. W. 1904 A, 537.
Claypole, E. W. 1896 B (Titanichthys, Brontichthys).
1903 A, 316.
Dames, W. 1898 E, 529.
Dean, B. 1900 A, 26.
1900 B, 12.
1901 C, 120.
1907 A, 48.
1908 A, 202.
1909 C, 270.
Eastman, C. R. 1905 A, 42.
1907 B, 140, 234.
1908 A, 203.
Gaudry, A. 1896 A, 59.
Heilprin, A. 1887 A, 149.
Hussakof, L. 1906 A, 120.
1909 B, 269.
1911 B, 124 (Brontichthys; syn. of Titanichthys).
Jaekel, O. 1919 A, 75.
1926 A, 166.
Kemna, A. 1903 A, 353.
1904 A, 69.
Koken, E. 1893 B, 172.
Newberry, J. S. 1889 A, 130.
Osborn, H. F. 1902 H, 749.
Pompeckj, J. F. 1913 A, 1116.
Sauvage, H. E. 1899 B, 86.
Stensiö, E. A. 1925 B, 137, 173.
Woodward, A. S. 1890 F, 147.
1915 B, lxx.
1922 C, 80.
Zittel and Koken 1911 A, 83.
Zittel and Schlosser 1923 A, 43.
Zittel and Woodward 1902 A, 60.

Titanichthys agassizii Newb.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1903 A, 320 (T. agassizi).
Dean, B. 1909 C, 270.
Eastman, C. R. 1907 B, 19, fig. 29.
1908 A, 204, 284, fig. 31.
Hussakof, L. 1908 A, 18, figs. 2, 5*a*.
Sauvage, H. E. 1899 B, 87.
Stensiö, E. A. 1925 B, 143, text-figs. 14, 16.
Upper Devonian (Cleveland); Ohio.

Titanichthys attenuatus Wright.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 19.
1908 A, 284.
Upper Devonian (Cleveland); Ohio.

Titanichthys brevis Claypole.

Hay, O. P. 1902 A, 348.
Eastman, C. R. 1907 B, 19.
1908 A, 284.
Upper Devonian (Cleveland); Ohio.

Titanichthys clarkii Newb.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1903 A, 316, 320 (T. clarki).
Dean, B. 1909 C, 270 (T. clarki).
Eastman, C. R. 1907 B, 19, 141, 234, figs. 27, 28 (T. clarki).
1908 A, 285 (T. clarki).
Hussakof, L. 1906 A, 120.
1908 A, 18, figs. 3, 4, 5*b* (T. clarki).
Kemna, A. 1904 A, 68 (T. clarki).
Upper Devonian (Cleveland); Ohio.

Titanichthys hussakofi, nom. nov.

Hay, O. P. 1902 A, 348 (Brontichthys clarki).
Claypole, E. W. 1895 I, 8 (Brontichthys clarki).
1903 A, 321 (Brontichthys clarki).
Eastman, C. R. 1907 B, 19 (Brontichthys clarki).
1908 A, 284 (Brontichthys clarki).
Hussakof, L. 1911 B, 124, fig. 1 (Titanichthys clarki).
Upper Devonian (Cleveland); Ohio.
The assignment of this species to *Titanichthys* requires a new specific name.

Titanichthys rectus Claypole.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1896 B, 351.
Claypole, E. W. 1903 A, 316, 320.
Eastman, C. R. 1907 B, 19.
1908 A, 285.
Hussakof, L. 1911 B, 125, fig. 3.
Hussakof and Bryant 1919 A, 65, text-fig. 20.
Upper Devonian (Cleveland shale); Ohio.

Titanichthys sp. indet.

Hay, O. P. 1902 A, 348.
Branson, E. B. 1914 A, 63, pl. iii. Upper Devonian, Missouri.
Cleland, H. F. 1911 A, 157. Middle Devonian; Wisconsin.
Hussakof and Bryant 1919 A, 65, text-fig. 20.
Upper Devonian (Cleveland); Ohio.

TRACHOSTEIDÆ Dean.

Dean, B. 1901 C, 120.
Dean, B. 1909 C, 276.

TRACHOSTEUS Newb. Type *T. clarkii* Newb.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1896 B, 351.
Dean, B. 1900 A, 25.
1901 C, 120.
1909 C, 272, figs. 56, 57.
Dean, Gudger, Henn 1923 A, 665.
Eastman, C. R. 1900 G, 288.
Hussakof, L. 1906 A, 148.
Hussakof and Bryant 1919 A, 91.
Jordan, D. S. 1920 C, 447 (*Dinichthys mirabilis* erroneously given as type).

Trachosteus clarkii Newb.

Hay, O. P. 1902 A, 348.
Claypole, E. W. 1903 A, 320 (T. clarki).
Dean, B. 1909 C, 272, pl. xli (T. clarki).
Eastman, C. R. 1907 B, 19 (T. clarki).
1908 A, 285.
Hussakof, L. 1908 A, 21.
Upper Devonian (Cleveland); Ohio.

MYLOSTOMATIDÆ A. S. Woodward.

Hay, O. P. 1902 A, 350.
Abel, O. 1919 A, 102.
Dean, B. 1901 C, 120, 122 (Mylostomidæ).
Eastman, C. R. 1906 D, 20 ("mylostomids").
1907 A, 211 ("mylostomid").
1907 B, 23, 149, 231.
1908 A, 177.
1909 C, 261 ("mylostomids").
Goodrich, E. S. 1909 A, 263 (Mylostomidæ).
Gregory, W. K. 1907 D, 447 (Mylostomidæ).
Jaekel, O. 1903 D, 58 ("mylostomatiden").
Jordan, D. S. 1905 A, i, 587 (Mylostomidæ).
1907 B, 760 (Mylostomidæ).
1923 A, 89 (Mylostomidæ).
Schlosser, M. 1917 A, 133 ("mylostomatiden").
Stensiö, E. A. 1925 B, 180 ("mylostomids").
Zittel and Schlosser 1923 A, 45.

DINOMYLOSTOMA Eastman. Type *D. beecheri* Eastman.

Eastman, C. R. 1906 D, 15, 23.
Dean, B. 1907 A, 47, 48.
Eastman, C. R. 1906 A, 137.
1907 B, 94, 151, 228.
1908 A, 177.
1909 B, 997.
1909 C, 261.
1917 A, 250.
Hussakof, L. 1906 A, 119.
1913 A, 245.
Woodward, A. S. 1922 B, 34.

Dinomylostoma beecheri Eastman.

Eastman, C. R. 1906 D, 23, pl. i, figs. 4, 5; pl. ii, figs. 13, 14, 16, 17; pls. iv, v; text-figs. F-H.
1906 A, 137, fig. 2.
1907 A, 226.
1907 B, 17, 151, 228, pl. xiv, figs. 5, 6; pl. xv; text-figs. 32, 33.
1908 A, 177, 282.
1909 C, 261.
Hussakof, L. 1908 A, 14.
1913 A, 246; fig. 1*a*.
Upper Devonian (Portage); New York.

Dinomylostoma buffaloensis Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 86, pl. xxiii, fig. 1; pl. xxiv, figs. 1, 2, 4, 5; text-fig. 29.
Upper Devonian (Genesee); New York.

Dinomylostoma eastmani Hussakof.

Hussakof, L. 1913 A, 245, pl. xlvii, fig. 7; text-fig. 1*b*.
Eastman, C. R. 1908 A, 179 ("undescribed species").
Devonian (New Albany); Kentucky.

Dinomylostoma sp. indet.

Hussakof and Bryant 1919 A, 13, 19, 90, pl. xxiv, figs. 5, 6. Upper Devonian (Genesee); 19, 90, pl. xxiii, fig. 2: (Portage); New York.

COPANOGNATHUS Hussakof and Bryant. Type *C. crassus* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 84.

Copanognathus crassus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 84, pl. xxii, figs. 2-4; text-fig. 28.
Upper Devonian (Genesee); New York.

MYLOSTOMA Newb. Type *M. variabile* Newb.

Hay, O. P. 1902 A, 350.
Adams, L. A. 1919 A, 127.
Branson, E. B. 1922 A, 6.
Bridge, T. W. 1904 A, 537.
Claypole, E. W. 1896 B, 350, 351.
Dean, B. 1900 A, 26.
1901 B, 101.
1901 C, 120.
1907 A, 47, 48.
1908 A, 203.
1912 A, 226.
Dean, Gudger, Henn 1923 A, 664, 665.
Eastman, C. R. 1900 G, 288.
1906 A, 132, 136.
1906 D, 1, 20.
1907 A, 213.
1907 B, 97, 149, 231.
1908 A, 179.
1909 B, 997.
1909 C, 261.
1917 A, 250.
Hussakof, L. 1906 A, 119.
Hussakof and Bryant 1919 A, 125.
Pompeckj, J. F. 1913 A, 1118, 1120.
Stensiö, E. A. 1925 B, 164, 180.
Woodward, A. S. 1922 B, 35.
Zittel and Koken 1911 A, 84.

Mylostoma eastmani Branson.

Branson, E. B. 1914 A, 62, pl. ii, fig. 3.
Upper Devonian; Missouri.

Mylostoma newberryi Eastman.

Eastman, C. R. 1907 A, 224, fig. D.
1908 A, 180, 285.
1909 C, 262.
Hussakof, L. 1908 A, 16.
Upper Devonian (Cleveland); Ohio.

Mylostoma terrelli Newb.

Hay, O. P. 1902 A, 350.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1906 D, pl. iii, fig. 21.
1907 A, 213.
1908 A, 180, 285.
1909 B, 997.
1909 C, 264.
1917 A, 251.
Hussakof, L. 1909 B, 268 (Syn. of M. variabile).
Upper Devonian (Cleveland); Ohio.

Mylostoma variabile Newb.

Hay, O. P. 1902 A, 350.
Abel, O. 1912 F, 439.
1919 A, 103, fig. 62.
1920 A, 324, fig. 515.
Claypole, E. W. 1903 A, 320.
Dean, B. 1901 B, 100, pls. vii, viii; text-figs. 3-10.
Eastman, C. R. 1906 A, 136, fig. 1.
1906 D, 21, pl. i, figs. 1-3, 6-9; pl. ii, figs. 10-12, 15; pl. iii, figs. 19, 20; text-fig. E.
1907 A, 213, pl. xix; text-figs. A-C.
1907 B, 19, 98, 149, 231, pl. xiv. figs. 1-4; text-figs. 18, 31.
1908 A, 162, 285, figs. 23, 25.
1909 B, 997.
1909 C, 263, figs. 1, 3.
Goodrich, E. S. 1909 A, 264, fig. 233 (M. variabilis).
Hussakof, L. 1908 A, 16.
1909 B, 267.
1911 B, 124, pl. viii, fig. 2 (Brontichthys clarki, Clark's specimen).
Newberry, J. S. 1889 A, 165, pl. xiii, figs. 3-5; pls. xv, xvi.
Zittel and Schlosser 1923 A, 45, fig. 58.
Upper Devonian (Cleveland); Ohio.

DIPLOGNATHUS Newb. Type *D. mirabilis* Newb.

Hay, O. P. 1902 A, 348.
Abel, O. 1912 F, 487.
Dean, B. 1900 A, 26.
1901 C, 120.
Dean, Gudger, Henn 1923 A, 664.
Eastman, C. R. 1908 A, 181.
Hussakof, L. 1906 A, 122, 148.
Schlosser, M. 1917 A, 133.
Stensiö, E. A. 1925 B, 176 (Diplognatus).
Zittel and Koken 1911 A, 83.
Zittel and Schlosser 1923 A, 43.

Diplognathus mirabilis Newb.

Hay, O. P. 1902 A, 348.
Adams, L. A. 1919 A, 125, fig. 4.
Claypole, E. W. 1896 B, 351 ("Diplognathus").
1903 A, 320 (D. mirabile).
Eastman, C. R. 1907 B, 19.
1908 A, 285.
1909 C, 269.
Hussakof, L. 1906 A, 149, fig. 25.
1908 A, 14.
Jaekel, O. 1919 A, 80, fig. 7.
Koken, E. 1893 B, 172.
Woodward, A. S. 1922 B, 32, fig. 4.
Upper Devonian (Cleveland); Ohio.

DINOGNATHUS Hussakof. Type *D. ferox* Hussakof.

Hussakof, L. 1909 B, 268.
Eastman, C. R. 1909 A, 998.
1909 C, 264, fig. 2.
1917 A, 251 (Syn.? of Mylostoma).

Dinognathus ferox Hussakof.

Hussakof, L. 1909 B, 268, fig. 5.

Eastman, C. R. 1909 B, 997.
1909 C, 264.
1915 B, 440.
1917 A, 251, fig. 5 (Syn. ? of Mylostoma terrelli).
Upper Devonian (Cleveland shale); Ohio.

SELENOSTEIDÆ Dean.

Dean, B. 1901 C, 120.
Goodrich, E. S. 1909 A, 263.

Jordan, D. S. 1905 A, i, 587.
1923 A, 89.

SELENOSTEUS Dean. Type *S. kepleri* Dean = *S. brevis* (Claypole).

Dean, B. 1901 A, 94.
1901 C, 114, 120.
Hussakof, L. 1906 A, 122.

Selenosteus brevis (Claypole).

Hay, O. P. 1902 A, 348 (Titanichthys).
Abel, O. 1919 A, 100, fig. 59 (S. kepleri).
Dean, B. 1901 A, 94, pls. v, vi; text-figs. 1, 2 (S. kepleri).

Eastman, C. R. 1907 B, 19 (S. kepleri).
1908 A, 285 (S. kepleri).
Goodrich, E. S. 1909 A, 264, fig. 233 (S. kepleri).
Hussakof, L. 1908 A, 17 (S. kepleri).
1911 B, 125, pl. viii, fig. 4.
Upper Devonian (Cleveland); Ohio.

Selenosteus sp. indet.

Hussakof and Bryant 1919 A, 19, 78, text-fig. 26. Upper Devonian (Portage); New York.

STENOSTEUS Dean. Type *S. glaber* Dean.

Dean, B. 1901 A, 89.
Dean, B. 1901 C, 120.
Hussakof, L. 1906 A, 148.
Jordan, D. S. 1920 C, 492 (Type "S. glaberi").
Stensiö, E. A. 1925 B, 173.

Stenosteus glaber Dean.

Dean, B. 1901 A, 89, pls. iii, iv.

Eastman, C. R. 1907 B, 19.
1908 A, 285.
Hussakof, L. 1908 A, 18.
Upper Devonian (Cleveland); Ohio.

Stenosteus pertenuis Branson.

Branson, E. B. 1911 B, 28, pl. i, figs. 8, 10, 11.
Devonian (Ohio shales); Ohio.

CALLOGNATHUS Newb. Type *C. regularis* Newb.

Hay, O. P. 1902 A, 338.
Dean, B. 1901 C, 120.

Callognathus regularis Newb.

Hay, O. P. 1902 A, 338.
Claypole, E. W. 1896 B, 353.
1903 A, 321 (C. regulare).
Hussakof, L. 1908 A, 6.
Upper Devonian (Cleveland); Ohio.

Callognathus serratus Newb.

Hay, O. P. 1902 A, 338.
Claypole, E. W. 1896 B, 353.
1903 A, 321.
Eastman, C. R. 1907 B, 17, 19.
1908 A, 282, 285.
Hussakof, L. 1908 A, 6.
Upper Devonian (Cleveland); Ohio: (Portage); New York.

Superorder DIPNEUSTA Haeckel.

Haeckel, E. 1868 A, 435, 441, 447.
Unless otherwise indicated the writers, as cited, use for this superorder the name Dipnoi.
Hay, O. P. 1902 A, 350.
Abel, O. 1912 F, 635 ("dipneusten").
1914 C, 354 ("dipneustes").
1919 A, 33, 171, fig. 7.
1920 A, 336, 339, fig. 539 (Dipneusti).
1921 A, 155 ("dipneusten").
1926 C, 44 ("dipneusten").
Agar, W. E. 1907 A, 625.
Allis, E. P. 1909 A, 202 (Dipneusta).
1913 A, 324.
1915 A, 594 (Dipneusti).
1922 A, 151 (Dipneusti).
1923 B, 156 (Dipneusti).
Anderson, R. J. 1912 D, 250.
Anthony, R. 1912 A ("dipnoïs").

Arldt, T. 1907 D, 651.
1923 A, 700 ("dipnoer").
Ayers, H. 1885 A, 479 ("dipnoer").
1906 A, 77 (Dipneusta).
Baird, H. S. 1922 A, 115.
Baraldi, G. 1877 A, 28.
Bardeleben, K. 1896 A, 113 ("dipnoer").
1901 A, 28 ("dipnoer").
1903 A, 20 ("dipnoer").
1907 A, 37.
Barrell, J. 1915 B, 402, 406.
Beer, G. R. 1926 A, 303 (Dipneusta).
Belling, D. E. 1912 A, 69.
Boas, J. E. V. 1914 C, 231.
Boulenger, G. A. 1901 D, 29 (Dipneusti).
1902 A, 150 (Dipneusti).
Braus, H. 1901 B, 165, 194 ("dipnoer").
1906 A ("dipnoer").

Bridge, T. W. 1878 A, 730.
1897 A, 602.
1904 A, 505, 738.
Brindley, H. H. 1900 A, 325 ("Dipnoans").
Briquel, P. 1898 A, 14 (Dipneustes).
Broili, F. 1904 A, 105 ("dipnoer").
Bronn, H. G. 1849 A, 812, seq.
Carter, J. T. 1905 A, 136, 139.
Carus, V. 1875 A, 594.
Case, E. C. 1915 A, 124 ("dipnoans").
1924 B, 7.
Chamberlin, T. C. 1900 A, 411 ("dipnoans").
Cockerell, T. D. A. 1911 A, 831 (Dipnoi or Dipneusti).
Cope, E. D. 1871 T, 449, 450.
1885 BB, 64.
1891 B, 455.
1891 N, 10, 14.
Coulon, L. 1903 A, 151 (Dipneustes).
Cunningham, J. T. 1897 A, 488.
1912 A, 246, 253.
Dames, W. 1899 B, 366.
Dean, B. 1900 A, 22, 29.
1912 A, 227.
1916 A ("fishes").
Dean, Gudger, Henn 1923 A, 677.
Delafontaine, M. 1877 A, 266.
Derjugin, K. 1910 A, 587.
1910 B, 208.
Dollo, L. 1889 E, 153 (Dipneustes).
1906 B, 136, 137 (Dipneustes).
Dombrowski, B. A. 1925 A, 79.
Drüner, L. 1902 A, 438 ("dipnoer").
Duméril, A. 1870 A, 427.
Eastman, C. R. 1900 G, 287.
1901 C, 329.
1905 A, 50 (Dipneusti).
1906 A, 132 (Dipneusti).
1906 D, 1 (Dipneusti).
1907 B, 23, 88, 228 (Dipneusti).
1908 A, 62 (Dipnoi); 69, 157 (Dipneusti).
1911 A, 20 (Dipneusti).
1917 A, 245, 247.
Eastman and Barbour 1902 A, 267 ("dipnoans").
Ebner, V. 1896 A, 146 ("dipnoer").
Edgeworth, F. H. 1925 A, 225.
Frassetto, F. 1915 A.
Fuchs, H. 1907 C, 26 ("dipnoer").
1908 C, 208 ("dipnoer").
1909 B, 165 ("dipnoer").
Fürbringer, K. 1902 A ("dipnoer").
1904 A ("dipnoer").
Gadow, H. 1896 A, 15.
1902 B, 359.
1910 A, 27.
Gaskell, W. H. 1908 A, 23, 45, 148 ("dipnoans").
Gaupp, E. 1898 B, 841, 865 ("dipnoer").
1901 B, 941 ("dipnoer").
1905 D, 920 ("dipnoer").
1906 B, 683.
Gegenbaur, C. 1867 B, 382, 391.
1870 C, 425.
1879 A, 522 ("dipnoer").
Gill, T. 1905 A, 658 (Dipnoi, Dipneusti).
1909 B, 838.
Goodrich, E. S. 1904 A, 480, 503.
1908 A, 765, 767.
1909 A, 230, 238, 366.
Goodrich, E. S. 1913 A, 80.
1924 A, 935.
Gregory, W. K. 1904 A, 58.
1907 D, 447 (Dipneusti).
1911 A, 509 ("dipnoans").
1911 B, 582.
1912 D, 220.
1914 C, 267.
1915 D, 320, 348.
1920 A, 218.
1922 A, 9, 79 ("dipnoans," Dipnoi).
1927 G, 267 ("dipnoan fishes").
Gregory and Adams 1915 A, 763.
Haeckel, E. 1873 A, 512, 520, 586 (Dipneusta).
1893 A, xvi (Dipneusta).
Hanson, F. B. 1919 B, 67 (Dipneusti).
Hase, A. 1907 A, 658 ("dipnoer").
1913 A ("dipnoer").
Hasse, C. 1893 B, 533.
1893 C, 91.
Hatschek, B. 1889 B, 115 ("dipnoer").
Heilprin, A. 1887 A, 302.
Hertwig, O. 1892 A.
Hilzheimer, M. 1913 A, 473 ("dipnoer").
Hoernes, R. 1886 A, 557.
Howes, G. B. 1894 A, 83.
1902 A, 525.
Hubbs, C. L. 1919 A, 570 (Amphibioidei, part; Dipneusti).
Hubrecht, A. A. W. 1908 A, 150.
Huene, F. 1926 A, 260 ("dipnoer").
Hussakof, L. 1906 A, 126 ("dipnoans").
1908 C, 313 ("dipnoans").
1910 B, 305 ("dipnoans").
Huxley, T. H. 1859 D, 417.
1869 G, 453.
1876 E, 103, 121.
1881 A, 454.
1883 B, 570.
Imms, A. D. 1904 A, 23.
Jacobshagen, E. 1919 A, 75, 110.
1920 A, 88, 92, 95 ("dipnoer").
Jaekel, O. 1901 A, 558, 559 ("dipnoer").
1902 B, 135 ("dipnoer").
1902 C, 610 ("dipnoer").
1902 E, 1115 ("dipnoer").
1903 F, 37 ("dipnoer").
1903 G, 389 ("dipnoer").
1906 D, 187 ("dipnoer").
1909 A, 198 ("dipnoer").
1911 A, 69, 77.
1927 A, 251 (Dipnoi).
1927 B, 338 ("dipnoer").
Jaquet, M. 1898 B, 320, pls. xxv-xxix (Protopterus).
Jordan, D. S. 1903 A, 136 ("dipnoans").
1905 A, i, 609; ii, 566 (Dipneusti).
1907 B, 225, 235, 760 (Dipneusti).
1923 A, 110.
Kathariner, L. 1899 A, 345 ("dipnoer").
Kehrer, F. A. 1896 A, 351.
Keith, A. 1911 A, 294.
Kellicott, W. E. 1905 A, 137.
Kerr, J. G. 1900 A, 233.
1900 B, 299.
1901 A, 694 ("dipnoans").
1908 A, 169 ("dipnoans").
1908 B, 170.

Keyes, C. 1922 A, pl. iii (Dipnoia).
1923 A, 113.
Kingsbury, B. F. 1895 A, 132.
Kingsley, J. S. 1885 B, 299.
1900 A, 249.
1901 B, 338.
1925 A, 13, 35, 115, 240.
Klaatsch, H. 1893 B, 654.
1893 C, 148, 181.
Koken, E. 1893 B, 252 ("dipnoer").
Krall, A. 1908 A, 578 ("dipnoer").
Lakjer, T. 1927 A ("dipnoer").
Leunis and Ludwig 1883 A, 777.
Lönnberg, E. 1901 A.
1902 A.
Lubosch, W. 1911 B, 741, 748 ("dipnoer").
Lull, R. S. 1917 B, 485, 488 (Dipneusti).
Luther, A. 1913 B, 33, 61 (Dipneusti).
Lütken, C. 1871 A, 291 ("diptériens").
Mayhew, R. L. 1924 A, 331.
Meek, A. 1916 A, 55.
Miall, L. C. 1872 A, 39.
Mollier, S. 1897 A, 3 ("dipnoer").
Müller, J. 1845 A, 135.
Nauck, E. T. 1926 B, 72 ("dipnoer").
Osborn, H. F. 1905 N, 235.
1916 E, 605.
1917 B, 311.
Osburn, R. C. 1907 A, 424.
1907 B, 181.
Oswald, F. 1911 A, 409.
Paramore, R. H. 1910 A, 1393.
Parker, W. K. 1879 C, 338.
1887 B, 54.
1888 C, 399.
1890 A, 62.
Parker and Haswell 1897 A, 229.
Pehrson, T. 1922 A.
Perret, A. 1900 A, 786 ("dipneustes").
Petronievics, B. 1919 A, 411 ("dipneustes").
Pompeckj, J. F. 1913 A, 1133.
Priem, F. 1908 B, 6 ("dipneustes").
Rabl, C. 1901 A, 489 ("dipnoer").
Rauther, M. 1913 A, 1099.
Regan, C. T. 1904 A, 330, 331, 339 (Dipneusti).
1909 B, 75, 76 (Dipneusti).
Reynolds, S. H. 1897 A, 105, 106, 539 (Dipneusta).
Ridewood, W. G. 1896 A, 386.
Röse, C. 1892 F, 399 ("dipnoer").
Romer, A. S. 1924 A, 121.
Rosén, N. 1916 A, 23.
Ryder, J. 1885 E, 91, 93.
1886 A, 71.
Sabatier, A. 1904 A, 249 ("dipneustes").
Sagemehl, M. 1883 A ("dipnoer").
1884 A ("dipnoer").
Sauvage, H. E. 1899 A, 6 ("dipnoiques").
Schauinsland, H. 1906 A, 483 ("dipneusten").
Schlosser, M. 1917 A, 133, 139, 146 ("dipnoer").
Schmalhausen, J. J. 1913 A, 47 ("dipnoer").
1913 B, 757 ("dipnoer").
1913 C.
1916 A, 65.
1916 B, 147.
1917 A, 108.
Schmalhausen, J. J. 1923 B, 543.
Schneider, A. 1887 A, 97, pl. xi (Dipneusti).
Schöne, G. 1902 A, 1 ("dipnoer").
Schuchert, C. 1915 A, 687.
Schuchert and Levene 1927 A, 285 ("lungfishes").
Semon, R. 1898 A, 100 ("dipnoer").
1899 B, 295 ("dipnoer").
1901 A, 180, 184 ("dipnoer").
1901 B, 130 ("dipnoer").
Sewertzoff, A. N. 1902 A, 593 ("dipnoer").
1918 A, 207.
1926 A, 507, 534 (Dipnoi, Dipneusta).
1926 C, 44 ("dipneusten).
1926 D, 26 (Dipneusta).
1926 F, 274.
Shann, E. W. 1919 A, 532.
Simpson, G. G. 1926 J, 173.
Smith, G. E. 1911 A, 293.
1912 A, 426.
Solger, B. 1880 A, 365 ("dipnoer").
Sollas, W. J. 1920 A, 525.
Sollas and Sollas 1903 A, 287.
Stannius, H. 1854 A, 7, seq.
Steinmann, G. 1907 A, 407.
1927 A, 76 ("dipnoer").
Stensiö, E. A. 1921 A, 135.
1925 A, 131, 182.
1925 B, 161, 187.
Steihan, P. 1900 A, 307 ("dipnoiques").
Stromer, E. 1912 A, 27.
1920 A, 12.
1925 B, 348.
Suschkin, P. P. 1910 A, 248 ("dipnoer").
Terra, P. 1911 A, 220.
Thevenin, A. 1910 A, 35 (Dipneustes).
Traquair, R. H. 1878 A, 12.
1880 A, 159.
1900 C, 505.
Ussow, S. 1900 A, 182.
Vanhoffen, E. 1891 A, 134 ("dipnoer").
Vogel, R. 1909 A, 501 ("dipnoer").
Wallace, A. R. 1876 A, ii, 458.
Watson, D. M. S. 1913 D, 26.
1925 A, 849.
1926 A, 190, 194.
Watson and Gill 1923 A, 163.
Wiedersheim, R. 1880 C, 122 ("dipnoer").
1892 A, 45 ("dipnoer").
Williston, S. W. 1912 E, 258.
Winslow, G. M. 1898 A, 149, 191.
Wintrebert, P. 1910 B, 79 ("dipneustes").
Woodward, A. S. 1898 E, 329 ("dipnoan fishes").
1906 C, 274.
1909 A, 323 ("dipnoans").
1910 B, 464 ("dipnoans").
1915 B, lxx.
1922 B, 27 (Dipneusti).
1922 C, 77.
1924 A, 114.
Woodward, H. 1904 B, 141.
Wright, W. 1909 A, 671.
Zittel and Koken 1911 A, 73.
Zittel and Schlosser 1923 A, 78.
Zittel and Woodward 1902 A, 61.

Order DIPTEROMORPHI, new name.

Hay, O. P. 1902 A, 351. (Ctenodipterini).
Arldt, T. 1907 D, 648 (Ctenodipterini).
Barrell, J. 1915 B, 402 (Ctenodipterini).
Briquel, P. 1898 A, 16 (Ctenodipterini).
Eastman, C. R. 1906 A, 142 ("ctenodipterines").
1906 D, 6 ("ctenodipterines").
1907 B, 23, 94, 157 (Ctenodipterini).
1908 A, 69, 158, 207 (Ctenodipterini).
1909 C, 269 ("ctenodipterines").
Gregory, W. K. 1907 D, 447 (Ctenodipterini).
Hilzheimer, M. 1913 A, 473 (Ctenodipterini).
Hoernes, R. 1886 A, 550 (Ctenodipteridæ).
Huxley, T. H. 1861 D, 440, 444 (Ctenodipterini).
Jaekel, O. 1911 A, 77 (Dipteri).
Jordan, D. S. 1905 A, i, 612 (Ctenodipterini).
1907 B, 238, 760 (Ctenodipterini).
1923 A, 110 (Ctenodipterini).
Klaatsch, H. 1890 A, 223 ("ctenodipterinen").
Semon, R. 1901 B, 130 ("ctenodipterinen").
Traquair, R. H. 1878 A, 12 (Ctenodipterini).
1880 A, 155, 159 (Ctenodipterini).
Zittel and Woodward 1902 A, 61 (Ctenodipterini).

DIPTERIDÆ Owen.

Owen, R. 1846 E, 50.
Hay, O. P. 1902 A, 351.
Agassiz, L. 1844 D, 142 ("dipteriens").
Bronn, H. G. 1849 A, 780, seq. (Dipterini).
Cope, E. D. 1891 N, 15.
Dean, Gudger, Henn 1923 A, 401.
Eastman, C. R. 1907 B, 23, 159.
1908 A, 210 (Ctenodontidæ).
Goodrich, E. S. 1908 A, 765.
1909 A, 256.
Jordan, D. S. 1905 A, i, 612.
1907 B, 226, 760.
1923 A, 110.
Reynolds, S. H. 1897 A, 70, 111, 117, 124.
Schlosser, M. 1917 A, 133 ("dipteriden").
Sewertzoff, A. N. 1923 B.
Stromer, E. 1905 H, 216.
Zittel and Koken 1911 A, 73.
Zittel and Schlosser 1923 A, 79.

DIPTERUS Sedgw. and Murch. Type *D. valenciennesi* Sedgw. and Murch.

Hay, O. P. 1902 A, 351.
Abel, O. 1907 D, (162).
1919 A, 33, 180, figs. 7, 129-135.
1920 A, 340, fig. 509.
Agassiz, L. 1832 A, 140.
1833 A, 471 (Catopterus).
1835 B, 342.
1835 H, 204 (Catopterus).
1839 A, 599.
1877 A, 124.
Allis, E. P. 1905 A, 487.
Arldt, T. 1923 A, 701.
Atthey, T. 1868 C, 354.
Barkas, W. J. 1874 D, 550.
Berry, E. W. 1925 A, 358.
Böklen, H. 1887 A, 78.
Bridge, T. W. 1897 A, 603.
1904 A, 506, fig. 301.
Briquel, P. 1898 A, 14.
Bronn, H. G. 1848 A, 428.
1849 A, 655.
Calvin, S. 1897 B, 17.
Coulon, L. 1903 A, 153.
Cunningham, J. T. 1912 A, 254, fig. 23.
Dean, B. 1907 A, 48.
Dean, Gudger, Henn 1923 A, 625.
Delafontaine, M. 1877 A, 268.
Derjugin, K. 1910 B, 208.
Eastman, C. R. 1905 A, 54, fig. 7.
1906 A, 131.
1907 B, 159, 193, 229, fig. 34.
1908 A, 210, 231, figs. 33, 34.
1911 A, 16, fig. 4.
1915 A, 282.
1917 A, 245.
Etheridge, R. 1906 A, 131.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1904 A, 503, 506, fig. 6.
1908 A, 765, 767.
Goodrich, E. S. 1909 A, 509, figs.
Gregory, W. K. 1915 D, 323, fig. 1.
Heilprin, A. 1887 A, 149, 301.
Hussakof, L. 1908 C, 312.
1910 B, 305.
Huxley, T. H. 1861 D, 434, figs. 9, 10.
1876 E, 121.
1876 F, 166.
Jaekel, O. 1911 A, 77, fig. 80.
Jordan, D. S. 1905 A, i, 612; ii, 567.
1907 B, 238.
Jordan and Evermann 1917 A, 125.
Kerr, J. G. 1900 B, 299.
Kiaer, J. 1924 A, 93, fig. 40.
Lankester, E. R. 1905 A, 250, fig. 182.
Lull, R. S. 1917 B, 485.
Miall, L. C. 1872 A, 40.
Miller, H. 1851 A, 92.
Müller, J. 1845 A, 93.
Murchison, R. I. 1845 A, 252, fig. 49.
Osborn, H. F. 1916 E, 605, fig. 14.
1917 B, 170, fig.
Petronievics, B. 1919 A, 407, 411.
Pompeckj, J. F. 1913 A, 1133, fig. 39.
Regan, C. T. 1904 A, 339.
Ridewood, W. G. 1896 A, 388.
Schlosser, M. 1898 D, 121.
Schmalhausen, J. J. 1913 A, 75.
Semon, R. 1901 A, 181.
1901 B, 125, figs. e-i.
Sewertzoff, A. N. 1923 B, 140.
1924 A, 579.
1926 A, 523, 534.
1926 C, 44.
1926 D, 80, 89.
Stensiö, E. A. 1921 A, 136.
1925 A, 182.
1925 B, 162.
Stromer and Peyer 1917 A, 37.

Suschkin, P. P. 1910 A, 249.
Traquair, R. H. 1880 A, 151, 159.
1889 D, 97, pl. ii.
1898 B, 46.
1900 C, 505.
Watson, D. M. S. 1916 B, 28, pl. i, fig. 1; text-figs. 6, 8, 9.
1917 A, 979.
1926 A, 195, figs. 2, 3.
Watson and Day 1916 A, 28, text-figs. 6, 8, 9.
Watson and Gill 1923 A, 168-215, figs. 32-34.
Woodward, A. S. 1910 B, 467.
1915 B, lxx.
1922 C, 77, fig. 78.
Zittel and Koken 1911 A, 74.
Zittel and Schlosser 1923 A, 79, figs. 135, 136.

Dipterus angustus Newberry.

Hay, O. P. 1902 A, 354 (Sagenodus).
Eastman, C. R. 1907 B, 22.
1908 A, 212, 289.
1917 A, 247, pl. viii, fig. 5.
Hussakof, L. 1908 A, 53 (Sagenodus).
Upper Devonian (Catskill or Chemung); Pennsylvania.

Dipterus calvini Eastman.

Hay, O. P. 1902 A, 351.
Eastman, C. R. 1907 B, 16, 160, 229, pl. iv, fig. 1.
1908 A, 49, 213, 219, 279, pl. ii, fig. 1.
Middle Devonian (Cedar Valley); Iowa.

Dipterus contraversus Hay.

Hay, O. P. 1902 A, 351.
Claypole, E. W. 1903 A, 320 (D. radiatus).
Eastman, C. R. 1907 B, 22.
1908 A, 212, 289.
Hussakof, L. 1908 A, 51.
Upper Devonian (Catskill); Pennsylvania.

Dipterus costatus Eastman.

Hay, O. P. 1902 A, 351.
Eastman, C. R. 1907 B, 20, 161, 229, pl. iv, fig. 9.
1908 A, 213, 220, 286, pl. ii, fig. 8.
Upper Devonian (State Quarry); Iowa.

Dipterus digitatus Eastman.

Eastman, C. R. 1908 A, 213, 221, pl. ii, fig. 6; pl. vii, figs. 16-25.
Branson, E. B. 1914 A, 65, pl. iv, fig. 21.
Eastman, C. R. 1908 A, 286.
1915 A, 282, fig. 2.
1917 A, 246.
Upper Devonian (State Quarry); Iowa, Missouri, Colorado.

Dipterus eastmani Stauffer.

Stauffer, C. R. 1909 A, 151, 182, 196, pl. xvii, figs. 14-17.
Middle Devonian (Columbus); Ohio.

Dipterus flabelliformis Newb.

Hay, O. P. 1902 A, 351.
Butts, C. 1903 A, 991 (Ctenodus).
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 21, 163.
1908 A, 214, 221.
Hussakof, L. 1906 A, 150.
1908 A, 51.
Devonian (Chemung); Pennsylvania.

Dipterus fleisheri (Newb.).

Hay, O. P. 1902 A, 351.
Eastman, C. R. 1907 B, 22, 162, 229, pl. vii, fig. 2.
1908 A, 212, 225, 289, pl. ii, fig. 16.
Hussakof, L. 1908 A, 52.
Upper Devonian (Catskill); Pennsylvania, New York.

Dipterus gemmatus Hussakof and Bryant.

Hussakof and Bryant 1919 A, 15, 170, pl. lv, fig. 2.
Upper Devonian (Genesee); New York.

Dipterus ithacensis Williams.

Hay, O. P. 1902 A, 351.
Eastman, C. R. 1907 B, 18, 163.
1908 A, 212, 213, 282.
Upper Devonian (Portage); New York.

Dipterus minutus Newb.

Hay, O. P. 1902 A, 352.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 21, 163.
1908 A, 214, 288.
Upper Devonian (Chemung); Pennsylvania.

Dipterus mordax Eastman.

Hay, O. P. 1902 A, 352.
Branson, E. B. 1922 A, 6, 35, 128, pl. xxi, fig. 11.
Eastman, C. R. 1907 B, 20, 161, 229, pl. iv, figs. 5, 6.
1908 A, 213, 215, 220, 286, pl. ii, figs. 4, 5; pl. vii, figs. 5-9.
1915 A, 282, fig. 3.
1917 A, 246.
Upper Devonian (State Quarry); Iowa: Devonian (Callaway); Missouri: Devonian; Colorado.

Dipterus nelsoni Newb.

Hay, O. P. 1902 A, 352.
Claypole, E. W. 1903 A, 319 (D. nelsoni), p. 320 (D. levis).
Eastman, C. R. 1907 B, 21, 163, 229 (D. alleghaniensis, D. levis as syns.).
1908 A, 213, 214, 223, 288, pl. ii, fig. 11; pl. vii, figs. 1-4 (D. levis a syn.).
Hussakof, L. 1906 A, 150.
1908 A, 52.
Upper Devonian (Chemung); Pennsylvania, New York.

Dipterus pectinatus Eastman.

Eastman, C. R. 1908 A, 213, 222, 286, pl. ii, figs. 2, 7; pl. vii, figs. 10-15.
Eastman, C. R. 1915 A, 282, fig. 4.
1917 A, 246.
Upper Devonian (State Quarry); Iowa: Devonian; Colorado.

Dipterus quadratus (Newb.).

Hay, O. P. 1902 A, 355 (Sagenodus).
Eastman, C. R. 1902 B, 97 (Sagenodus).
1902 G, 541 (Sagenodus).
1903 B, 194 (Sagenodus).
1907 B, 163.
1908 A, 214.
Hussakof, L. 1916 A, 131 ("Rhizodus quadratus").
Pennsylvanian; Ohio, Illinois.

Dipterus sherwoodi Newb.

Hay, O. P. 1902 A, 352.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 22, 162.
1908 A, 212, 226, 289.
Hussakof, L. 1908 A, 52.
Upper Devonian (Catskill); Pennsylvania.

Dipterus uddeni Eastman.

Hay, O. P. 1902 A, 352.
Eastman, C. R. 1907 B, 16, 160, 229, pl. iv, figs. 3, 4.
1908 A, 213, 218, 279, pl. ii, fig. 3.
Hussakof, L. 1908 A, 53.
Middle Devonian (Cedar Valley); Iowa.

Dipterus sp. indet.

Clarke, J. M. 1913 A, 98. Lower Devonian; New Brunswick.
Eastman, C. R. 1907 B, 164, pl. iv, figs. 2, 7, 8, 12. Upper Devonian (State Quarry); Iowa.
1908 A, 279. Middle Devonian (Cedar Valley); Iowa.
Hussakof and Bryant 1919 A, 15, 171. Upper Devonian (Genesee); New York.

PALÆDAPHUS Van Beneden and de Koninck. Type *P. insignis* Van B. and de K.

Hay, O. P. 1902 A, 352.
Arldt, T. 1923 A, 701.
Barkas, W. J. 1874 D, 547.
Gervais, P. 1852 A, explan. pl. lxxvii.
1859 A, 558, pl. lxxvii.
Jordan, D. S. 1923 A, 110.
Woodward, A. S. 1890 F, 147.
Zittel and Koken 1911 A, 74.
Zittel and Schlosser 1923 A, 80, fig. 137.
Zittel and Woodward 1902 A, 63.

Palædaphus lesleyi (Newb.).

Hay, O. P. 1902 A, 352.
Claypole, E. W. 1903 A, 319 (Heliodus).
Eastman, C. R. 1907 B, 21 (Heliodus).
1908 A, 213, 288 (Heliodus).
1909 B, 997 (Heliodus).
1909 C, 269 (Heliodus).
Hussakof, L. 1908 A, 53.
Devonian (Chemung); Pennsylvania.

CONCHODUS M'Coy. Type *C. ostreæformis* M'Coy.

Hay, O. P. 1902 A, 352.
Böklen, H. 1887 A, 78.
Eastman, C. R. 1908 A, 227.
Traquair, R. H. 1878 A, 16.
Zittel and Koken 1911 A, 74.

Conchodus plicatus Dawson.

Hay, O. P. 1902 A, 352.
Eastman, C. R. 1908 A, 234.
Lambe, L. M. 1904 C, 42.
Coal Measures; Nova Scotia.

Conchodus variabilis Eastman.

Eastman, C. R. 1908 A, 213, 230, 286, pl. viii, except figs. 16, 20, 29, 34.
Branson, E. B. 1914 A, 65, pl. iii, fig. 8.
Upper Devonian (State Quarry); Iowa: (Craghead); Missouri.

Conchodus sp. indet.

Bell, W. A. 1913 A, 340, Pennsylvanian (Joggins); Nova Scotia.

GANORHYNCHUS Traquair. Type *G. woodwardi* Traquair.

Hay, O. P. 1902 A, 352.
Etheridge, R. 1906 A, 129.
Traquair, R. H. 1874 A, 211.

Ganorhynchus beecheri Newb.

Hay, O. P. 1902 A, 352.
Claypole, E. W. 1903 A, 321.
Eastman, C. R. 1907 B, 21, 22.
1908 A, 213, 288.
Upper Devonian (Chemung, Catskill); Pennsylvania.

Ganorhynchus oblongus Cope.

Hay, O. P. 1902 A, 352.
Hussakof, L. 1908 A, 53, fig. 24.
Devonian (Catskill); Pennsylvania.

Ganorhynchus sp. indet.

Eastman, C. R. 1908 A, 213. Upper Devonian (Cedar Valley); Iowa.

PHANEROPLEURIDÆ.

Hay, O. P. 1902 A, 352.
Abel, O. 1919 A, 33, fig. 7 (Phaneropleuron).
Böklen, H. 1887 A, 78 (Phaneropleuron).
Briquel, P. 1898 A, 14 (Phaneropleuron).
Goodrich, E. S. 1908 A, 767, fig. 201 (Phaneropleuron).
1909 A, 255.
Hoernes, R. 1886 A, 550.
Jordan, D. S. 1905 A, i, 612; ii, 586 (Phaneropleuron).
1907 B, 238 (Phaneropleuron).
1923 A, 110.
Klaatsch, H. 1890 A, 221 ("phaneropleurinen").
Matthew, W. D. 1907 A, 9 (Phaneropleuron).

Schlosser, M. 1917 A, 133 ("phaneropleuriden").
Traquair, R. H. 1871 A, 534 (Phaneropleurini).
1872 A, 41, fig. (Phaneropleuron).
Traquair, R. H. 1893 C, 265.
Zittel and Koken 1911 A, 74.
Zittel and Schlosser 1923 A, 81.

SCAUMENACIA Traquair. Type *S. cura* (Whiteaves).

Hay, O. P. 1902 A, 353.
Abel, O. 1919 A, 33, 180, fig. 7.
1921 A, 249.
Clark, J. M. 1911 A, 128.
Dean, B. 1907 A, 48.
Eastman, C. R. 1908 A, 235.
Goodrich, E. S. 1904 A, 503.
1909 A, 233, 255, fig. 227.
Gregory, W. K. 1915 D, 323.
Hussakof, L. 1912 B, 134.
Lambe, L. M. 1904 C, 16.
Matthews, G. F. 1907 A, 9 (Phaneropleuron).
Petronievics, B. 1919 A, 412.
Schmalhausen, J. J. 1913 B, 757.
1913 C.
Stensiö, E. A. 1925 A, 182.
1925 B, 162.
Traquair, R. H. 1900 C, 506.
Watson, D. M. S. 1916 B, 33.
Watson and Day 1916 A, 39.
Watson and Gill 1923 A, 212.
Whiteaves, J. F. 1907 B, 252.
Zittel and Schlosser 1923 A, 81.

Scaumenacia curta (Whiteaves).

Hay, O. P. 1902 A, 353.
Abel, O. 1912 F, 636, fig. 470.
1919 A, 179, figs. 7, 137.
1920 A, 340, fig. 539.
Clarke, J. M. 1913 A, 113.
Claypole, E. W. 1883 C, 278 (Phaneropleuron).
Eastman, C. R. 1907 B, 17.
1908 A, 213, 235, 280, fig. 35.
1917 A, 247, fig. 2.
Gregory, W. K. 1915 D, 323, fig. 1.
Hussakof, L. 1912 B, 134, pls. ii, iii; text-figs. 3-6.
Hussakof and Bryant 1919 A, 171, pl. lvii, figs. 3, 4; text-fig. 57.
Lambe, L. M. 1904 C, 34, 42.
1912 A, 5.
Matthew, G. F. 1907 A, 9 (Phaneropleuron).
Pompeckj, J. F. 1913 A, 1134, fig. 40.
Traquair, R. H. 1900 C, 506.
Whiteaves, J. F. 1907 B, 253, pl. iii.
Zittel and Schlosser 1923 A, 81, fig. 138.
Upper Devonian (Scaumenac); Quebec.

CTENOPLEURON Matthew. Type *C. nerepisense* Matthew, G. F.

Matthew, G. F. 1907 A, 7.
Stromer, E. 1920 A, 11.
Woodward, A. S. 1915 B, lxiii.

Ctenopleuron nerepisense Matthew, G. F.

Matthew, G. F. 1907 A, 7, plate.
Kiaer, J. 1924 A, 124, 134.
Woodward, A. S. 1910 D, 31.
Silurian (Clinton); New Brunswick.

Order CERATODONTOMORPHI, new name.

Hay, O. P. 1902 A, 353 (Sirenoidei).
Agar, W. E. 1906 A (Lepidosiren).
1907 A (Lepidosiren).
Arldt, T. 1907 D, 682 (Sirenoidea).
Bischoff, T. L. W. 1840 B, 116, pls. vi-x (Lepidosiren).
Carus, V. 1875 A, 594 (Sirenoidei).
Cope, E. D. 1891 N, 14 (Sirenoidei).
Eastman, C. R. 1906 D, 20 ("sirenoids").
1907 B, 23, 234 (Sirenoidei).
1908 A, 69 (Sirenoidei).
Edwards, A. M. 1840 A, 159 (Lepidosiren).
Gill, T. 1909 B, 838 (Sirenoidei).
Gregory, W. K. 1907 D, 447 (Sirenoidei).
Jordan, D. S. 1905 A, i, 612, 613 (Sirenoidei).
1907 B, 238, 239, 760 (Sirenoidei).
1923 A, 110 (Sirenoidei).
Kerr, J. G. 1901 B, 1 (Lepidosiren).
1902 A, 417 (Lepidosiren).
Kingsley, J. S. 1885 B, 300 (Dipneumona).
Lönnberg, E. 1902 A (Lepidosiren).
Owen, R. 1839 C, 327, pls. xxiii-xxvii (Lepidosiren).
Reynolds, S. H. 1897 A, 34, 70 (Sirenoidei).
Steinmann, G. 1907 A, 407 (Sirenoidea).
Traquair, R. H. 1878 A, 12 (Sirenoidei).
Wallace, A. R. 1876 A, ii, 458 (Sirenoidei).
Woodward, A. S. 1922 C, 77 (Sirenoidei).
Zittel and Woodward 1902 A, 64 (Sirenoidei).

CTENODONTIDÆ.

Hay, O. P. 1902 A, 353.
Arldt, T. 1912 A, 648, 658.
1923 A, 700 ("ctenodontiden").
Bridge, T. W. 1904 A, 505.
Cockerell, T. D. A. 1913 B, 121.
Cope, E. D. 1891 N, 15.
Eastman, C. R. 1907 B, 23.
1908 A, 210.
Goodrich, E. S. 1909 A, 257.
Gregory, W. K. 1907 D, 447.
Jordan, D. S. 1905 A, i, 613.
1907 B, 239, 760.
1923 A, 110.
Pompeckj, J. F. 1913 A, 1134.
Schlosser, M. 1917 A, 134 ("ctenodontiden").
Schmalhausen, J. J. 1913 A, 76.
Zittel and Koken 1911 A, 75, 76.
Zittel and Schlosser 1923 A, 81.
Zittel and Woodward 1902 A, 62.

CTENODUS Agassiz. Type *C. cristatus* Agassiz.

Hay, O. P. 1902 A, 353.
Abel, O. 1912 F, 491.
1919 A, 33, 181, fig. 7.
Arldt, T. 1907 D, 339.
1923 A, 701.
Atthey, T. 1868 C, 354.
Barkas, W. J. 1874 D, 550.
Bridge, T. W. 1897 A, 602.
Case, E. C. 1908 C, 576.
1926 B, 196.
Deecke, W. 1913 A, 73.
Etheridge, R. 1906 A, 130.
Eastman, C. R. 1906 A, 132.
1908 A, 211.
Giebel, C. G. 1855 A, 115.
Goodrich, E. S. 1904 A, 504.
1909 A, 239, fig. 209.
Gregory, W. K. 1915 D, 323.
Hussakof, L. 1908 C, 312.
1910 B, 306.
Jaekel, O. 1902 E, 1078.
Jordan, D. S. 1905 A, i, 613.
1907 B, 239.
1919 B, 191.
Kiaer, J. 1924 A, 93, fig. 40.
Koken, E. 1893 B, 252.
Miall, L. C. 1875 D, 436.
Moodie, R. L. 1923 B, 297.
Owen, R. 1849 D, 42.
Petronievics, B. 1919 A, 412.
Pompeckj, J. F. 1913 A, 1135.
Priem, F. 1908 B, 7.
Ridewood, W. G. 1896 A, 388.
Sewertzoff, A. N. 1923 B.
Stromer and Peyer 1926 A, 534.
1917 A, 38.
Traquair, R. H. 1878 A, 3.
1878 B, 483.
Watson and Day 1916 A, 31, 40, text-fig. 8.
Watson and Gill 1923 A, 163-215, figs. 8, 11, 12, 21-28.
Woodward, A. S. 1922 C, 78, fig. 79.
1924 A, 114.
Woodward, H. 1904 B, 141.
Zittel and Koken 1911 A, 75.
Zittel and Schlosser 1923 A, 81, fig. 139.
Zittel and Woodward 1902 A, 63.

Ctenodus wagneri Newb.

Hay, O. P. 1902 A, 353.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 19.
1908 A, 212, 213, 285.
Hussakof, L. 1908 A, 51.
Upper Devonian (Cleveland); Ohio.

Ctenodus sp. indet.

Eastman, C. R. 1902 B, 97. Pennsylvanian (Mazon Creek); Illinois.
1903 B, 194. Pennsylvanian (Mazon Creek); Illinois.

SAGENODUS Owen. Type *S. inæqualis* Owen.

Hay, O. P. 1902 A, 353.
Abel, O. 1919 A, 181.
Atthey, T. 1868 C, 357 (Saganodus).
Bronn, H. G. 1849 A, 649 (Ctenodus).
Case, E. C. 1926 B, 196.
Cockerell, T. D. A. 1911 C, 126.
1913 B, 121.
Delafontaine, M. 1877 A, 268 (Ctenodus).
Dollo, L. 1896 A.
Eastman, C. R. 1903 C, 493.
Hussakof, L. 1911 A, 163.
Jordan, D. S. 1905 A, i, 613.
1907 B, 239.
Stromer and Peyer 1917 A, 36.
Watson, D. M. S. 1916 B, 37, pl. iii, fig. 9.
Watson and Day 1916 A, 41.
Watson and Gill 1923 A, 163-215, figs. 1-12 14-20.
Zittel and Koken 1911 A, 76.
Zittel and Schlosser 1923 A, 82.
Zittel and Woodward 1902 A, 64.

Sagenodus copeanus Williston.

Hay, O. P. 1902 A, 354.
Abel, O. 1919 A, 180, fig. 139 (S. copei).
Eastman, C. R. 1903 B, 186.
Zittel and Schlosser 1923 A, 82, fig. 140 (S. copei).
Zittel and Koken 1911 A, 76, fig. 134 (S. copei).
Pennsylvanian (Missourian); Kansas.

Sagenodus cristatus Eastman.

Eastman, C. R. 1903 B, 188, 194, pl. iii, fig. 30.
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus dialophus (Cope).

Hay, O. P. 1902 A, 354.
Beede, J. W. 1907 A, 119 (Ctenodus).
Case, E. C. 1915 A, 96.
Hussakof, L. 1911 A, 163, pl. xxvi, figs. 6, 7.
Permian (Wichita, Clear Fork); Texas: (Enid); Oklahoma.

Sagenodus foliatus Cope.

Hay, O. P. 1902 A, 354.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Merrill, G. P. 1907 A, 18.
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus fossatus (Cope).

Hay, O. P. 1902 A, 354 (S. fossatus, S. gurleyanus, S. porrectus); 355 (S. vabasensis).
Beede, J. W. 1907 A, 119 (Ctenodus).
Case, E. C. 1900 A, 705, pl. i, fig. 7 (S. vabasensis); fig. 8 (S. gurleyanus); fig. 10 (S. fossatus).
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 7, 8.
Hussakof, L. 1908 A, 54, fig. 26 (S. porrectus).
1911 A, 163, pl. xxvi, figs. 8-11, pl. xxvii, figs. 1-3.
1916 A, 131 (S. gurleyanus, S. porrectus, S. vabasensis as syns.).
Permian; Illinois.

Sagenodus heterolophus (Cope).

Hay, O. P. 1902 A, 354.
Case, E. C. 1900 A, 706.
Hussakof, L. 1911 A, 164, pl. xxvii, fig. 6.
Permian; Illinois.

Sagenodus jugosus Hay.

Hay, O. P. 1902 A, 354. Pennsylvanian; Ohio.

Sagenodus lacovianus Cope.

Hay, O. P. 1902 A, 354.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus occidentalis (Newb. and Worth.).

Hay, O. P. 1902 A, 354.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Merrill, G. P. 1907 A, 18 (S. browniæ); 19 (S. occidentalis).
Pennsylvanian; Illinois, Ohio.

Sagenodus ohioensis (Cope).

Hay, O. P. 1902 A, 354 (S. ohionensis).
Hussakof, L. 1916 A, 129, fig. 2 (S. ohiensis).
Pennsylvanian; Ohio.

Sagenodus paucicristatus (Cope).

Hay, O. P. 1902 A, 354.
Case, E. C. 1900 A, 707, pl. i, fig. 11.
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 9.
Hussakof, L. 1911 A, 164, pl. xxvii, fig. 4.
Pennsylvanian (Upper); Illinois.

Sagenodus periprion (Cope).

Hay, O. P. 1902 A, 354.
Beede, J. W. 1907 A, 119 (Ctenodus).
Case, E. C. 1915 A, 96.
Hussakof, L. 1911 A, 165, pl. xxvii, fig. 5.
Permian (Wichita? Clear Fork?); Texas.

Sagenodus quincunciatus Cope.

Hay, O. P. 1902 A, 355.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Merrill, G. P. 1907 A, 19.
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus reticulatus (Newb. and Worth.).

Hay, O. P. 1902 A, 355.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Hussakof, L. 1916 A, 131 ("Ctenodus reticulatus").
Merrill, G. P. 1907 A, 19 (S. magister, S. reticulatus).
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus serratus (Newb.).

Hay, O. P. 1902 A, 355.
Hussakof, L. 1908 A, 54.
1916 A, 130, 131, fig. 5.
Pennsylvanian; Ohio.

Sagenodus textilis Hay.

Hay, O. P. 1902 A, 355.
Eastmann, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Merrill, G. P. 1907 A, 18 (S. gurleianus); 19 (S. textilis).
Pennsylvanian (Mazon Creek); Illinois.

Sagenodus vinslovii (Cope).

Hay, O. P. 1902 A, 355.
Case, E. C. 1900 A, 703, pl. i, fig. 6.
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 10.
Hussakof, L. 1911 A, 165, pl. xxvii, figs. 7, 8.
Permian (Wichita?, Clear Fork?); Texas: Pennsylvanian; Illinois.

Sagenodus sp. indet.

Case, E. C. 1902 B, 63. Permian; Oklahoma.

GNATHORHIZA Cope. Type *G. serrata* Cope.

Hay, O. P. 1902 A, 355.
Case, E. C. 1908 C, 579.
Hussakof, L. 1911 A, 166.

Gnathorhiza pertenuis (Eastman).

Eastman, C. R. 1903 C, 493, figs. 1, 2 (Sagenodus).
Broili, F. 1904 A, 105 (Sagenodus).
Case, E. C. 1908 C, 579 (Sagenodus).
Eastman, C. R. 1906 D, 8 (Sagenodus).
Hussakof, L. 1908 A, 53 (Sagenodus. Syn.? of G. pusilla).
1911 A, 167 (Syn. of G. pusilla).
Permian (Cimarron); Texas.

Gnathorhiza pusilla (Cope).

Hay, O. P. 1902 A, 355 (Sagenodus).
Case, E. C. 1900 A, 705, pl. i, fig. 9 (Sagenodus).
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 6 (Ctenodus, Gnathorhiza).
Hussakof, L. 1911 A, 167, pl. xxvii, fig. 10.
Permian; Illinois, Texas, Oklahoma.

Gnathorhiza serrata Cope.

Hay, O. P. 1902 A, 355.
Beede, J. W. 1907 A, 119.
Hussakof, L. 1908 A, 53, fig. 25.
1911 A, 167, pl. xxvii, fig. 9 (Syn. of G. pusilla).
Upper Pennsylvanian; Illinois: Permian (Wichita, Clear Fork); Texas.

CERATODONTIDÆ Gill.

Hay, O. P. 1902 A, 355.
Arldt, T. 1907 D, 644 (Ceratodidæ).
1912 A, 662, 663.
1923 A, 701 ("ceratodontiden").
Bridge, T. W. 1904 A, 507.
Cockerell, T. D. A. 1913 B, 121.
Cunningham, J. T. 1912 A, 246.
Eastman, C. R. 1907 B, 23.
Goodrich, E. S. 1909 A, 257 (Ceratodidæ).
Gregory, W. K. 1907 D, 447.
Hoernes, R. 1886 A, 558 (Ceratodidæ).
Jaekel, O. 1911 A, 78 (Ceratodonti).
Jordan, D. S. 1905 A, i, 613, ii, p. 562.
1907 B, 238, 239, 760.
1923 A, 110.
Kingsley, J. S. 1885 B, 300 (Sirenidæ).
Meek, A. 1916 A, 55.
Rauther, M. 1913 A, 1099.
Scharff, R. F. 1911 A, 379.
Stromer, E. 1916 A, 415.
Stromer and Peyer 1917 A, 1, 65.
Zittel and Koken 1911 A, 76.
Zittel and Schlosser 1923 A, 82.

CERATODUS Agassiz. Type *C. latissimus* Agassiz.

Hay, O. P. 1902 A, 355.
Abel, O. 1912 F, 664.
1919 A, 182.
1920 A, 341, fig. 540.
1921 A, 155.
Adams, L. A. 1919 A, 80.
Agar, W. E. 1906 A.
1907 A, 625.
Agassiz, L. 1844 C, 267.
1877 A, 124.
Aichel, O. 1919 A, 242.
Allis, E. P. 1898 A, 460.
1905 A, 487.
1909 A, 202.
1913 A, 324.
1915 A.
1917 A, 110.
1918 A, 244.
1923 B, 172.
Arldt, T. 1907 D, 644.
1923 A, 701.
Ayers, H. 1885 A, 479.
Backman, G. 1913 A, 47.
Baird, H. S. 1922 A, 115.
Bardeleben, K. 1901 A, 72.
1903 A, 21.
Barkas, W. J. 1874 D, 549.
Barrell, J. 1915 B, 407.
Beer, G. R. 1924 C, 320, figs. 32-35, 42.
1926 A, 303, figs. 68-72, 112.
Berry, E. W. 1925 A, 358.
Bicknell, E. 1872 A, 189.
Boas, J. E. V. 1914 B, 546, fig. 9.
1914 C, 231, figs. 1-3, 6.
Böklen, H. 1887 A, 76.
Braus, H. 1900 A, 45.
1901 A, 183.
1901 B, 137, pls. xxi-xxiii, xxvii.
1906 A, 197.
Bridge, T. W. 1878 A, 691.
1897 A, 602.
Briquel, P. 1898 A, 11.
Bronn, H. G. 1848 A, 259.
1849 A, 637.
Broom, R. 1913 A, 459.
Bruyere, H. 1901 A, 89, fig.
Case, E. C. 1908 C, 576.
Cockerell, T. D. A. 1908 C, 162.
Cope, E. D. 1891 N, 14, fig. 5.
Cunningham, J. T. 1912 A, 246.
Dabelow, A. 1926 A, 99, fig. 5.
Dean, B. 1902 A, 774.
1906 A, 168.
1907 A, 48.
Dean, Gudger, Henn 1923 A, 673.
Deecke, W. 1926 A, 186.
Delafontaine, M. 1877 A, 266.
Derjugin, R. 1910 A, 588.
1910 B, 207.
Dohrn, A. 1884 A, 180.
Dombrowski, B. A. 1925 A, 79.
Eastman, C. R. 1906 A, 132.
1907 B, 56, 88, 95, 96, 182.
1908 A, 211.
Edgeworth, F. H. 1923 A, 359, figs. 31-39.
1923 D, 325, figs. 1-39.
1925 A, 225, 227, 241, figs. 29-40.
1926 A, 173, figs. 21, 22.
Eisler, P. 1895 A, 235.
Emery, C. 1887 A, 185.
1895 A, 224.
Frassetto, F. 1915 A, fig. 25.
Fürbringer, M. 1902 A.
1904 A, 405.
1904 B, 423, pls. xxvii-xli.
Gaskell, W. H. 1908 A, 148.
Gaupp, E. 1905 D, 921.
1906 B, 683.
Gegenbaur, C. 1879 A, 522.
Gervais, P. 1852 A, explan. pl. lxxvii.
Giebel, C. G. 1855 A, 115, pl. xlvii, fig. 2.
Gill, T. 1876 A, 153.
Goodrich, E. S. 1901 A, 321, fig. K.
1904 A, 480.
1906 A, 335.
1909 A, 507, figs.
1924 A, 936.
Gregory, W. K. 1904 A, 55, 57, fig. 9.
1915 D, 323.
Hasse, C. 1893 B, 533.
Haswell, W. A. 1884 A, 81.
Hatschek, B. 1889 A, 88, fig. 4.
Heilprin, A. 1887 A, 413.
Hoernes, R. 1886 A, 558.
Howes, G. B. 1894 A, 83.
Humphreys, J. 1908 A, 14.
Hussakof, L. 1906 A, 127.
1910 B, 305.
1911 A, 166.
Huxley, T. H. 1876 E, 84, figs. 1-7.
1876 F, 165.
1880 E, 470.

Jacobshagen, E. 1920 A, 88.
Jaekel, O. 1927 A, 252, fig. 1.
Jaquet, M. 1897 A, 174.
1899 C, 241, pls. xlvi-li.
1900 A, 60.
Jordan, D. S. 1919 B, 191.
Kathariner, L. 1899 A, 345.
Kellicott, W. E. 1905 A, 131.
Kerr, J. G. 1900 A, 228.
1900 B, 298.
1902 A, 424.
1908 A, 169.
1908 B, 171.
Kingsbury, B. F. 1895 A, 135.
Kingsley, J. S. 1885 B, 299, figs. 167, 168.
1925 A, 115, 240, figs. 39, 121, 253.
Klaatsch, H. 1893 C, 146.
Koken, E. 1893 B, 268.
Krall, A. 1908 A, 578.
Kravetz, L. 1911 A, 332, pls. i, ii.
Lakjer, T. 1927 A, 190, 278, fig. 69.
Lavocat, A. 1896 B, 196.
Leunis and Ludwig 1883 A, 779.
Lull, R. S. 1917 B, 483.
Luther, A. 1913 B, 34, figs. 15, 17, 27.
McGregor, J. H. 1901 B, 447.
Mantell, G. A. 1844 A, 619.
Meek, A. 1916 A, 55, 57, 62, 402.
Miall, L. C. 1872 A, 30, 41.
Mivart, St. G. 1878 B, 309, 332, fig. 15.
Mollier, S. 1897 A, 3.
Mook, C. C. 1918 A, 468.
Nauck, E. T. 1926 B, 76.
Neumayer, L. 1904 A, 125, pl. xiv, fig. 14.
Osborn, H. F. 1905 N, 235.
1916 E, 607.
1917 B, 172.
Owen, R. 1845 B, 63.
1866 A, 369, 385.
Palacký, J. 1902 B, 141.
Parker and Bettany 1877 A, 87.
Parker and Haswell 1897 A, 230, figs. 853-862.
Peale, A. C. 1876 A, 153.
Pehrson, T. 1922 A, 10.
Perret, A. 1900 A, 786.
Petronievics, B. 1919 A, 407, 412.
Peyer, B. 1920 A, 109.
Philippi and Frech 1903 A, 11, pl. ii.
Pompeckj, J. F. 1913 A, 1134, fig. 41.
Priem, F. 1908 B, 6, pl. i, fig. 1.
Rabl, C. 1901 A, 477.
Reynolds, S. H. 1897 A, 535, figs. 19, 20.
Ridewood, W. G. 1894 A, 632, figs. 1-3.
1896 A, 388, fig. 19.
1921 A, 329.
Romer, A. S. 1924 A, 126, 128, figs. 6-10.
Scharff, R. F. 1911 A, 379.
Schauinsland, H. 1906 A.
Schlosser, M. 1898 D, 121.
1917 A, 135, 139.
Schmalhausen, J. J. 1913 A, 47.
1917 A, 109.
1923 A, 534, fig. 1.
Semon, R. 1898 A, 51, pls. xi-xvii; text-figs. 1-4.
1899 A, 294.
1901 A, 181.
Semon, R. 1901 B, 113, pls. xvii-xx; text-figs. a-d, k-m.
Sewertzoff, A. N. 1902 A, 593, figs. 1-5.
1908 A, 195.
1926 D, 77, figs. 5, 8, 19-21, 26.
Solas and Solas 1903 A, 287.
Solger, B. 1880 A, 365.
Sorensen, W. 1894 A, 135.
Starks, E. C. 1916 A, 13.
Steinmann, G. 1912 B, 726.
1927 A, 79.
Stensiö, E. A. 1921 A, 44, 136.
1925 B, 113, 162.
Stephan, P. 1900 A, 307.
Stromer, E. 1916 A, 409.
Stromer and Peyer 1917 A, 1-76.
Stur, D. 1886 A, 381.
Sushkin, P. P. 1927 A, 268, fig. 1.
Terra, P. 1911 A, 221.
Tims, H. W. M. 1903 A, 133.
Traquair, R. H. 1878 A.
1898 B, 46.
1900 C, 506.
Ussow, S. 1900 A, 182.
Vanhöffen, E. 1891 A, 134.
Van Wijhe, J. W. 1922 A, 293.
Watson, D. M. S. 1916 B, 33.
1925 A, 848.
1926 A, 200.
Watson and Day 1916 A, 31, text-fig. 8.
Watson and Gill 1923 A, 165-215, figs. 13, 19.
Wiedersheim, R. 1880 C, 123.
1892 A, 45.
Woodward, A. S. 1911 C, 46.
1921 A, 180.
1921 C, 180.
1922 C, 78, figs. 80, 81.
1924 A, 114, fig. 7.
Woodward, H. 1878 A, 17, pl. ii, fig. 2.
1904 B, 141.
Zittel and Koken 1911 A, 77.
Zittel and Schlosser 1923 A, 82, fig. 141.

Ceratodus americanus Knight.

Hay, O. P. 1902 A, 356.
Cockerell, T. D. A. 1908 C, 162.
Mook, C. C. 1916 A, 149.
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

Ceratodus dorotheæ Case.

Case, E. C. 1921 B, 2, fig.
Case, E. C. 1921 C, 445.
1921 D, 338 ("Ceratodus").
1922 A, 445.
Triassic (Dockum); Texas.

Ceratodus eruciferus Cope.

Hay, O. P. 1902 A, 356.
Bowen, C. F. 1915 A, 118, 148, 150.
Brown, B. 1914 E, 378 (Rhineastes).
Cockerell, T. D. A. 1908 C, 162.
Hatcher, J. B. 1905 B, 68.
Hay, O. P. 1903 D, 120.
Hussakof, L. 1908 A, 50.
Lambe, L. M. 1902 A, 29 (Rhineastes).
1904 C, 22, 36, 44 (Rhineastes).

Matthew, W. D. 1916 A, 484 (Rhineastes cruciferus).
Osborn, H. F. 1902 I, 11.
Stromer, E. 1906 A, 207.
Cretaceous (Judith River); Montana: Belly River); Alberta.

Ceratodus favosus Cope.

Hay, O. P. 1902 A, 356.
Beede, J. W. 1907 A, 119.
Case, E. C. 1915 A, 96.
Hussakof, L. 1908 A, 51, fig. 23.
1911 A, 166, pl. xxiii, fig. 11.
Permian (Wichita, Clear Fork); Texas.

Ceratodus güntheri Marsh.

Hay, O. P. 1902 A, 356.
Cockerell, T. D. A. 1908 C, 162.
Gilmore, C. W. 1914 A, 25.
Marsh, O. C. 1878 A, 184, fig.
Mook, C. C. 1916 A, 149 (C. guntheri).
Simpson, G. G. 1926 E, 2.
Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

Ceratodus robustus Knight.

Hay, O. P. 1902 A, 356.
Cockerell, T. D. A. 1908 C, 162.
Mook, C. C. 1916 A, 149.
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

Ceratodus sp. indet.

Freudenberg, W. 1921 A, 111. Upper Cretaceous; Mexico.
Mook, C. C. 1916 A, 96. Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

SYNTHETODUS Eastman. Type *S. trisulcatus* Eastman.

Hay, O. P. 1902 A, 356.
Eastman, C. R. 1908 A, 231.
1917 A, 246.
Sauvage, H. E. 1899 A, 7.

Synthetodus calvini Eastman.

Eastman, C. R. 1908 A, 213, 233, 287, pl. ii, fig. 19, pls. x-xii.
Hussakof and Bryant 1919 A, 15, 17, 150, pl. lv, figs. 1, 2.
Upper Devonian (State Quarry and Sweetland Creek); Iowa: (Genesee); New York.

Synthetodus trisulcatus Eastman.

Hay, O. P. 1902 A, 356.
Eastman, C. R. 1907 B, 20.
1908 A, 213, 231, 286, pls. ix, xi.
Sauvage, H. E. 1899 A, 7.
Upper Devonian (State Quarry and Sweetland Creek); Iowa.

ACMONIODUS Hussakof and Bryant. Type *A. clarkei* Hussakof and Bryant.

Hussakof and Bryant 1919 A, 151.
Woodward, A. S. 1921 B, 36.
A genus of uncertain position.

Acmoniodus clarkei Hussakof and Bryant.

Hussakof and Bryant 1919 A, 13, 151, pl. lv, fig. 3; text-fig. 53.
Upper Devonian (Genesee); New York.

Subclass CROSSOPTERYGIA Cope.

When the authors quoted use the masculine plural ending this is indicated thus: (-ii).

Hay, O. P. 1902 A, 357.
Abel, O. 1919 A, 158, fig. 170.
1920 A, 338 (-ii).
1921 A, 214, 247 ("crossopterygier").
1922 F, (-ii).
Allis, E. P. 1905 A, 417 (Crossopterygidæ).
1909 A, 202.
1918 A, 242 (-ii).
1919 A, 374 (-ii).
1919 B, 73.
1922 A, 150 (-ii).
1923 B, 156 (-ii).
1926 A, 169 (-ii).
Anthony, R. 1912 A ("crossoptérygiens").
1913 A, 269 ("crossoptérygiens").
Arldt, T. 1907 D, 648.
1923 A, 491 ("crossopterygier").
Bardeleben, K. 1896 A, 113 ("crossopterygier").
1901 A, 70 ("crossopterygier").
1907 A, 36 ("crossopterygier").
Barrell, J. 1915 B, 402, 406 (-ii).
Bender, O. 1907 A, 39 ("crossopterygier").
Bender, O. 1910 A, 122 ("crossopterygier").
Boas, J. E. V. 1914 B, 542 ("crossopterygier").
Boulenger, G. A. 1901 D, 2 (-ii).
1917 C, 458 ("crossoptérygiens").
Braus, H. 1901 B, 209, 244 ("crossopterygier").
1904 A, 411 ("crossopterygier").
Bridge, T. W. 1878 A, 723 (-ii).
1904 A, 476, 737 (-ii).
Broom, R. 1913 B, 465 ("crossopterygians").
Bryant, W. L. 1919 A, 4, 22 (-ii).
Carus, V. 1875 A, 693 (-ii).
Case, E. C. 1915 A, 124 ("crossopterygians").
Chamberlin, T. C. 1900 A, 411 ("crossopterygians").
Collinge, W. E. 1893 B, 259.
Cope, E. D. 1871 T, 449, 450.
1891 N, 19.
Cunningham, J. T. 1897 A, 497 ("crossopterygians").
1912 A, 246, 251, 254 (-ii).
Dean, B. 1900 A, 8, 29 (-ii).
1916 A ("fishes").
Dean, Gudger, Henn 1923 A, 676 (-ii).
Dollo, L. 1906 B, 137 ("crossoptérygiens").

Eastman, C. R. 1901 C, 329 (-ii).
1904 C, 141 ("crossopterygians").
1905 A, 54 (-ii).
1907 B, 23, 165 (-ii).
1908 A, 62, 69, 237, 255 (-ii).
1911 A, 20 (-ii).
1916 A, 655 (-ii).
1916 B, 104 (-ii).
1917 A, 244, 270 (-ii).
Eastman and Barbour 1902 A, 267 ("crossopterygians").
Eimer, G. H. T. 1901 A, 254 ("crossopterygier").
Emery, C. 1887 A, 187 ("crossopterygier").
1895 A, 226 ("crossoptérygiens").
Fuchs, H. 1907 C, 26 ("crossopterygier").
Fürbringer, K. 1903 A, 377 ("crossopterygier").
Fürbringer, M. 1902 A, 198 ("crossopterygier").
Gadow, H. 1902 B, 359 (-ii).
Gill, T. 1898 A, 697 ("crossopterygians").
1905 A, 658 (-ii).
1909 B, 838 (-ii).
Goodrich, E. S. 1904 A, 499 (-ii).
1908 A, 765 (-ii).
1908 B, 546 (-ii).
1909 A, 280 (Osteolepidoti).
Gregory, W. K. 1907 D, 447, 456 (-ii).
1911 A, 509 ("crossopterygians").
1911 B, 892 ("crossopterygians").
1912 D, 220 (-ii).
1913 D, 806, 807 (-ii).
1914 C, 267 (-ii).
1915 D, 318, 325, 353 (-ii).
1920 A, 219 (-ii).
1922 A, 10 ("crossopterygians").
1927 G, 267 ("crossopterygians").
Hase, A. 1907 A, 653 ("crossopterygier").
Haswell, W. A. 1884 A, 80 ("crossopterygians").
Hertwig, O. 1879 A, lxxx (Polypterus).
Hilzheimer, M. 1913 A, 472 ("crossopterygier").
Hoernes, R. 1866 A, 550 (-ii).
Hubbs, C. L. 1919 A, 670 (Amphibioidei, part).
Hussakof, L. 1906 A, 124 ("crossopterygians").
Huxley, T. H. 1861 D, 442, 444 (Crossopterygidæ).
1866 B, 23 (Crossopterygidæ).
1876 E, 112 (-ii); p. 121 (Crossopterygidæ).
Jacobshagen, E. 1920 A, 90 ("crossopterygier").
Jaekel, O. 1902 A, 108 ("crossopterygier").
1909 A, 198 ("crossopterygier").
1911 A, 69, 75 (-ii).
Jordan, D. S. 1903 A, 136 ("crossopterygians").
1905 A, I, 598; II, 565 (-ii).
1907 B, 224, 759 (-ii).
1923 A, 108 (-ii).
Kellicott, W. E. 1905 A, 137 (-ii).
Kerr, J. G. 1900 A, 233.
1901 A, 694 ("crossopterygians").
1908 B, 170 ("crossopterygians").
1910 A, 203 ("crossopterygians").
1923 A, 108 (-ii).
Keyes, C. A. 1922 A, pl. iii.
Kiaer, J. 1924 A, 92, 111, 116 (-ii).
Kingsley, J. S. 1885 A, 95 (-ii).
1901 B, 338 (-ii).
1925 A, 100 (-ii).
Koken, E. 1893 B, 351 ("crossopterygier").
Lakjer, T. 1927 A ("crossopterygier").
Leunis and Ludwig 1883 A, 776 (-ii).
Lönnberg, E. 1901 A (Crossopterygidæ).
Lubosch, W. 1911 B, 748 ("crossopterygier").
Lütken, C. 1868 C (Crossopteri).
1871 A, 290 ("crossoptères").
Lull, R. S. 1917 B, 486 (-ii).
Luther, A. 1913 B, 10, 18, 51 (-ii).
Meek, A. 1916 A, 48, 54 (-ii).
Mollier, S. 1897 A, 3 ("crossopterygians").
Moodie, R. L. 1913 A, 183 ("crossopterygians").
1915 G, 371.
1915 H, 637, 641.
1926 A, 83.
Nauck, E. T. 1926 B, 70 ("crossopterygier").
Osborn, H. F. 1916 E, 601 (-ii).
1917 B, 174, 186.
Oswald, F. 1911 A, 409.
Parker and Haswell 1897 A, 202 (-ii).
Pehrson, T. 1922 A ("crossopterygians").
Pompeckj, J. F. 1913 A, 1135 (-ii).
Priem, F. 1908 B, 5 ("crossoptérygiens").
Rabl, C. 1901 A, 489 ("crossopterygier").
Rauther, M. 1913 A, 1099 (-ii).
Regan, C. T. 1904 A, 330, 331, 336 (-ii).
1908 D, 47 ("crossopterygians").
1909 B, 76 (-ii).
Reynolds, S. H. 1897 A, 33, 67, 68, 116.
Romer, A. S. 1924 A, 121 (-ii).
Rosén, N. 1916 A, 15, 30 (-ii).
Ryder, J. 1885 E, 96.
1886 A, 74, 77 (-ii).
Sagemehl, M. 1884 A, 20 ("crossopterygier").
Schauinsland, H. 1906 A, 455 ("crossopterygier").
Schlosser, M. 1917 A, 133, 138, 147 ("crossopterygier").
Schmalhausen, J. J. 1913 A, 18 ("crossopterygier").
1913 B, 757 ("crossopterygier").
1913 C (-ii).
1916 B, 147 (-ii).
1917 A, 110.
Schuchert, C. 1915 A, 690 (-ii).
Scupin, H. 1896 A, 153, 180 (-ii).
Semon, R. 1901 A, 180 ("crossopterygier").
1901 B, 130 ("crossopterygier").
Sewertzoff, A. N. 1923 B (-ii).
1924 A, 551-580, figs. i-xiv (Polypterus).
1926 A, 508.
1926 C, 42 (-ii).
1926 D, 76 (-ii).
1926 E, 552 ("crossopterygians").
1926 F, 274 (-ii).
Shitkov, B. M. 1899 A, 256 ("crossopterygier").
Smith, G. E. 1912 A, 427 (-ii).
Steinmann, G. 1907 A, 408 (-ii).
1927 A, 76 ("crossopterygier").
Stensiö, E. A. 1918 A, 117 ("crossopterygians").
1921 A, 43 (-ii).
1922 A, 1241 ("crossopterygians").
1925 A, 131.
1925 B, 161, 187 (-ii).
Stromer, E. 1905 C, 184 (-ii).
1912 A, 29 (-ii).
1920 A, 12, 15 (-ii).
1925 B, 355, 364 (-ii).
Sushkin, P. P. 1910 A, 250 (-ii).

Sushkin, P. P. 1927 A, 264 (-ii).
Thevenin, A. 1910 A, 35 ("crossopterygiens").
Traquair, R. H. 1870 A, 179 ("crossopterygians").
1877 B, 8 (-ii).
1880 A, 157 (Crossopterygidæ).
1900 C, 505 (-ii).
1905 A, 85 (-ii).
Versluys, J. 1912 B, 552 ("crossopterygier").
Vogel, R. 1909 A, 501 ("crossopterygier").
Watson, D. M. S. 1912 A ("crossopterygians").
1913 D, 26 (-ii).
Watson and Day 1916 A, 21 ("crossopterygians").
Wintrebert, P. 1910 B, 78 ("crossoptérygiens").
Woodward, A. S. 1906 A, 313 (-ii).
1906 C, 273.
1909 A, 324 ("crossopterygians").
1910 B, 464 ("crossopterygians").
Woodward, H. 1878 A, 22 (Crossopterygidæ).
1915 B, lxxi.
1922 B, 27.
1922 C, 82 (-ii).
1924 A, 116 (-ii).
Zittel and Koken 1911 A, 85 (-ii).
Zittel and Schlosser 1923 A, 84 (-ii).
Zittel and Woodward 1902 A, 69 (-ii).

Order RHIPIDISTIA Cope.

Hay, O. P. 1902 A, 357.
Allis, E. P. 1919 A, 377.
Case, E. C. 1924 B, 7.
Cope, E. D. 1891 N, 19.
Eastman, C. R. 1907 B, 23.
1908 A, 69.
Goodrich, E. S. 1909 A, 284.
Gregory, W. K. 1915 D, 326.
Gregory and Adams 1915 A, 763.
Jaekel, O. 1911 A, 75 (Holoptychii).
Jordan, D. S. 1905 A, i, 602.
Jordan, D. S. 1907 B, 228, 760.
1923 A, 108.
Osborn, H. F. 1916 E, 608, fig. 18.
Scupin, H. 1896 A, 154, 181 (Cyclodipterini)
Stensiö, E. A. 1918 A, 116.
1921 A, 129, 131, 140, 147.
1922 A, 1259, 1267 ("rhipidistids").
1925 A, 69, 91 ("rhipidistids").
Sewertzoff, A. N. 1923 B.
Watson, D. M. S. 1917 B, 49.
Watson and Day 1916 A, 26.

Suborder OSTEOLEPIDIFORMES, new name.

Boulenger, G. A. 1901 D, 2 (Osteolepida).
Bridge, T. W. 1904 A, 477 (Osteolepida).
Dean, Gudger, Henn 1923 A, 622 (Osteolepida).
Gregory, W. K. 1907 D, 448 (Osteolepida).
1912 D, 220 (Osteolepida).
Huene, F. 1926 A, 261 ("osteolepiden").
Jaekel, O. 1911 A, 79 (Osteolepidi); 76 (Onychodonti).
Sewertzoff, A. N. 1923 B, 118 (Osteolepidæ).

HOLOPTYCHIIDÆ Owen.

Owen, R. 1860 E, 132 (Holoptychidæ).
Hay, O. P. 1902 A, 358.
Abel, O. 1919 A, 163.
Arldt, T. 1912 A, 648, 658.
1923 A, 491 ("holoptychiden").
Barrell, J. 1915 B, 393.
Bridge, T. W. 1904 A, 479, 743 (Holoptychidæ).
Clarke, J. M. 1895 A, 121.
Dean, Gudger, Henn 1923 A, 622.
Eastman, C. R. 1907 B, 23, 165.
1908 A, 238.
1917 A, 237.
Goodrich, E. S. 1904 A, 501.
1909 A, 284.
Gregory, W. K. 1907 D, 448.
1915 D, 355.
Jordan, D. S. 1905 A, i, 603; ii, 575.
1907 B, 229.
1922 A, 108.
Lütken, C. 1871 A, 290 ("cyclodiptériens").
Pompeckj, J. F. 1913 A, 1135, 1136.
Rohon, J. V. 1889 A, 13 (Rhombodipterini).
Schlosser, M. 1917 A, 133 ("holoptychiden").
Sewertzoff, A. N. 1923 B, 119.
Stensiö, E. A. 1918 A, 117.
Stromer, E. 1905 H, 216.
Terra, P. 1911 A, 206 (Holoptychidæ).
Traquair, R. H. 1900 C, 505.
Watson and Day 1916 A, 26 (Holoptychidæ).
Zittel and Koken 1911 A, 85.
Zittel and Schlosser 1923 A, 84.
Zittel and Woodward 1902 A, 69.

HOLOPTYCHIUS Agassiz. Type *H. nobilissimus* Agassiz.

Hay, O. P. 1902 A, 358.
Abel, O. 1919 A, 164, figs. 116, 120.
1921 A, 248, fig. 89.
Agassiz, L. 1839 A, 599, pl. ii, figs. 1-4, 8 (Holoptychus).
1844 C, 269.
1877 A, 124 (Holoptichus).
Barkas, W. J. 1874 D, 551.
Braus, H. 1901 B, 231, fig. 20.
Bridge, T. W. 1904 A, 479, 743, fig. 277.
Bronn, H. G. 1848 A, 594.
1849 A, 654.
Bryant, W. L. 1919 A, 8.
Claypole, E. W. 1883 C, 281.
Cunningham, J. T. 1912 A, 254, fig. 23.
Darton, N. H. 1906 A, 563.
Davies, W. 1863 A, 135.
Deecke, W. 1913 A, 88.
Eastman, C. R. 1908 A, 239.
1908 B, 166.
Egerton, P. G. 1852 C, 6 L, 5.
Eichwald, E. 1840 A, 78 (Holoptychus).
Frech, F. 1897 A, 82, 123.
Giebel, C. G. 1855 A, 113.

Goodrich, E. S. 1908 A, 765.
1909 A, 281, 284, figs.
Gregory, W. K. 1915 D, 329.
1920 A, 219.
Heckel, J. 1851 A, 221.
Heilprin, A. 1887 A, 149, 301.
Hoernes, R. 1886 A, 551.
Hussakof, L. 1906 A, 143.
Huxley, T. H. 1861 D, 425, fig. 4 ("ganoids").
Jordan, D. S. 1919 B, 194 (Holoptychus).
Klaatsch, H. 1890 A, 221.
Knipe, H. R. 1912 A, 40, fig. 40.
Lütken, C. 1868 C, 55, fig. 8.
Mantell, G. A. 1844 A, 653.
Miall, L. C. 1872 A, 28, 40.
Miller, H. 1857 A, 247, figs. 99, 100.
Moodie, R. L. 1926 A, 67, 83, 94, pl. xi.
Murchison, R. I. 1854 A, 245, pl. xxxvi, figs. 9-13.
Osborn, H. F. 1916 E, 606, fig. 14.
1917 B, 170, fig.
Owen, R. 1866 A, 378.
Pehrson, T. 1922 A, 57.
Pompeckj, J. F. 1913 A, 1136, fig. 42.
Regan, C. T. 1904 A, 339.
Reynolds, S. H. 1897 A, 105.
Schmalhausen, J. J. 1913 A, 75.
Schuchert and Levene 1927 A, 266, fig.
Scupin, H. 1896 A, 154.
Sewertzoff, A. N. 1924 A, 579.
1926 A, 523.
Traquair, R. H. 1880 A, 156.
1898 B, 46.
Watson, D. M. S. 1912 B, 586.
1913 F, 957.
1916 B, 2, pl. ii, fig. 7; text-fig. 1.
1925 A, 821, 823.
Watson and Day 1916 A, 2, 21, pl. ii, fig. 7; text-fig. 1.
Woodward, A. S. 1890 F, 147.
1900 H, 1.
1906 C, 273, fig. 6.
1913 B, 82, pl. x, figs. 1, 2.
1915 B, lxxi.
1921 A, 181.
1922 B, 28, fig. 1.
1922 C, 82, figs. 85, 86.
Young, J. 1866 C, 317.
Zittel and Koken 1911 A, 86.
Zittel and Schlosser 1923 A, 85, figs. 143, 144.

Holoptychius americanus Leidy.

Hay, O. P. 1902 A, 358.
Claypole, E. W. 1883 B, 531.
1883 C, 279.
1903 A, 319.
Clarke and Ruedemann 1903 A, 767.
Eastman, C. R. 1904 B, 258.
1907 B, 21, 22, 167, 230.
1908 A, 239, 288, 290.
Hussakof, L. 1908 A, 55.
Hussakof and Bryant 1919 A, 175.
White, I. C. 1883 A, 459.
Upper Devonian (Catskill); Pennsylvania: (Chemung); New York: Devonian; Colorado.

Holoptychius filosus Cope.

Hay, O. P. 1902 A, 358.
Eastman, C. R. 1907 B, 21, 168.
1908 A, 239, 288.
Hussakof, L. 1908 A, 56.
Upper Devonian (Chemung); Pennsylvania.

Holoptychius flabellatus Cope.

Hay, O. P. 1902 A, 358.
Eastman, C. R. 1908 A, 239.
1908 B, 168.
Merrill, G. P. 1907 A, 12.
Upper Devonian (Catskill); Pennsylvania.

Holoptychius giganteus Agassiz.

Agassiz, L. 1843 B (1835), ii, pt. i, 175, pl. xix, fig. 13 (Gyrolepis).
Unless otherwise indicated, the authors, as quoted, apply to this species the name *H. nobilissimus;* but it is antedated by *giganteus.*
Agassiz, L. 1839 A, 600, pl. ii, *bis,* figs. 1, 2.
1844 B, 72, pl. xxii, fig. 2 (H. murchisoni).
Cross, W. 1905 C, 4 ("Holoplychius." This species?).
Eichwald, E. 1860 A, 1572.
Hussakof and Bryant 1919 A, 175 (H. giganteus); 176 (H. nobilissimus).
Lohest, M. 1888 A, 127, 139 (H. nob.); 134, pl. i, fig. 5; pl. ii, figs. 1-4; pl. iii, figs. 1, 3, 5, 6; pl. v, figs. 1-3 (H. dewalquei).
M'Coy, F. 1865 A, 595.
Miller, H. 1841, Old Red Sandst., 162, pl. ix, fig. 2 (*Fide* A. S. Woodward).
Traquair, R. H. 1890 F, 388.
Woodward, A. S. 1891 A, 323.
1900 H, 1, pl. i, figs. 1-10.
Upper Devonian, Scotland, Belgium, Russia, East Greenland: Upper Devonian (Elbert); Colorado.

Holoptychius granulatus Newb.

Hay, O. P. 1902 A, 358.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 21, 168.
1908 A, 239, 288.
Upper Devonian (Chemung); Pennsylvania.

Holoptychius hallii Newb.

Hay, O. P. 1902 A, 358.
Claypole, E. W. 1903 A, 319 (H. halli).
Clarke and Ruedemann 1903 A, 767 (H. halli).
Eastman, C. R. 1907 B, 22, 168.
1908 A, 239, 290.
Hussakof and Bryant 1919 A, 176.
Upper Devonian (Catskill); New York.

Holoptychius latus Cope.

Hay, O. P. 1902 A, 358.
Eastman, C. R. 1907 B, 168.
1908 A, 239.
1908 B, 168.
Merrill, G. P. 1907 A, p. 12.
Upper Devonian (Catskill); Pennsylvania.

Holoptychius princeps M'Coy.

M'Coy, F. 1848 C, 310.
Unless otherwise indicated, the following authors call this species *H. giganteus;* but the specific name had been previously applied by Agassiz to another species.
Hay, O. P. 1902 A, 358.
Claypole, E. W. 1903 A, 319 (This species?).
Eastman, C. R. 1904 B, 257, fig. 5.
1907 B, 20, 21, 22, 167.
1908 A, 239, 287, 288, 290.
1915 A, 280.
Hussakof, L. 1906 A, 150.
1908 A, 56 (This species?).
Murchison, R. I. 1854 A, pl. xxxvi, fig. 11.
Upper Devonian (Chemung, Catskill); New York, Pennsylvania: (Elbert); Colorado: Europe?).

Holoptychius? pustulosus Newb.

Hay, O. P. 1902 A, 358.
Claypole, E. W. 1903 A, 319 (This species?).
Eastman, C. R. 1907 B, 22, 168.
1908 A, 239, 288.
Hussakof, L. 1908 A, 56 (This genus?).
Upper Devonian (Chemung); Pennsylvania.

Holoptychius radiatus Newb.

Hay, O. P. 1902 A, 359.
Claypole, E. W. 1903 A, 319 (This species?).
Eastman, C. R. 1907 B, 22.
1908 A, 290.
Hussakof, L. 1908 A, 56.
Upper Devonian (Catskill); Pennsylvania.

Holoptychius scheii Kiaer.

Kiaer, J. 1915 A, 44, 47, pl. viii, figs. 3, 4.
Upper Devonian?; Ellesmere Land.

Holoptychius serrulatus Cope.

Hay, O. P. 1902 A, 359.
Eastman, C. R. 1908 A, 239.
1908 B, 168.
Hussakof and Bryant 1919 A, 176.
Merrill, G. P. 1907 A, 12.
Upper Devonian (Catskill); Pennsylvania.

Holoptychius tuberculatus Newb.

Hay, O. P. 1902 A, 359.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1904 B, 258, fig. 6.
1907 B, 20, 22, 168.
1908 A, 239, 287, 289.
1915 A, 280.
Hussakof, L. 1908 A, 57.
Kiaer, J. 1915 A, 45 (This species?).
Upper Devonian (Chemung); Pennsylvania; Ellesmere Land.

Holoptychius sp. indet.

Cross, W. 1905 C, 5. Upper Devonian (Elbert); Colorado.
1910 A, 5. Upper Devonian (Elbert); Colorado.
Eastman, C. R. 1907 B, 15. Middle Devonian; New York.
1908 A, 279. Devonian; Iowa, New York, Greenland.
Jordan, D. S. 1907 A, 120. Triassic; California.
Lull, R. S. 1918 A, 361. Devonian; Arizona.
Norton, W. H. 1906 A, 356. Middle Devonian (Cedar Valley); Iowa.

Glyptolepis Agassiz. Type *G. leptopterus* Agassiz.

Agassiz, L. 1844 B, 61, 62.
Hay, O. P. 1902 A, 358 (Holoptychius, in part).
Abel, O. 1919 A, 164, fig. 121.
Agassiz, L. 1844 B, 62 (in part).
Bronn, H. G. 1848 A, 537.
1849 A, 654.
Eastman, C. R. 1907 B, 166.
1908 A, 238.
Goodrich, E. S. 1909 A, 285.
Hoernes, R. 1886 A, 551.
Huxley, T. H. 1861 D, 426, fig. 7.
Jaekel, O. 1909 D, 718, fig. 10.
1911 A, 76, fig. 77.
Miller, J. 1859 A, 31.
Nicholson and Lydekker 1889 A, 969.
Oswald, F. 1911 A, 407, fig. 7.
Parker and Haswell 1897 A, 227, fig. 850.
Powrie, J. 1862 A, 435.
Scupin, H. 1896 A, 155.
Sewertzoff, A. N. 1926 D, 90.
Watson, D. M. S. 1916 B, 7, pl. ii, fig. 8.
Watson and Day 1916 A, 7, pl. ii, fig. 8.
Woodward, A. S. 1898 B, 72, 74.
Zittel, K. A. 1890 A, 179.
Zittel and Schlosser 1923 A, 85, fig. 8 (Syn. of Holoptychius).

Glyptolepis paucidens (Agassiz).

Agassiz, L. 1844 B, 61, 78, pl. xxxviii, fig. 11 (Platygnathus).
Kiaer, J. 1915 A, 45, 55, pl. viii, figs. 1, 2 (This species?).
Traquair, R. H. 1888 B, 513.
1890 H, 483.
Woodward, A. S. 1891 B, 336 [Holoptychius (Glyptolepis)].
Upper Devonian (Lower Old Red); Orkneys: Upper Devonian?; Ellesmere Land.

Glyptolepsis quebecensis Whiteaves.

Hay, O. P. 1902 A, 358 (Holoptychius).
Bryant, W. L. 1919 A, 5, pl. xvi, fig. 1 (Holoptychius).
Clark, J. M. 1913 A, 115 (Holoptychius).
Claypole, E. W. 1883 C, 278.
Eastman, C. R. 1907 B, 17 (Holoptychius); 166 (Glyptolepis).
1908 A, 238.
Hussakof and Bryant 1919 A, 174, text-fig. 58.
Kiaer, J. 1915 A, 46.
Lambe, L. M. 1904 C, 17, 34, 42 (Holoptychius).
Whiteaves, J. F. 1907 B, 253 (Holoptychius).
Upper Devonian (Scaumenac); Quebec.

APEDODUS Leidy. Type *A. priscus* Leidy.

Hay, O. P. 1902 A, 359.
Eastman, C. R. 1907 B, 166 (Syn.? of Holoptychius).
1908 A, 238 (Syn.? of Holoptychius).
Jordan, D. S. 1919 B, 283 (Syn.? of Dendrodus).

Apedodus priscus Leidy.

Hay, O. P. 1902 A, 359.
Claypole, E. W. 1903 A, 319.
Eastman, C. R. 1907 B, 21, 166, 225, pl. i, figs. 1, 2.
1908 A, 238.
Upper Devonian (Chemung); Pennsylvania.

DENDRODUS Owen. Type *D. biporcatus* Owen.

Hay, O. P. 1902 A, 359.
Agassiz, L. 1843 A (1844).
Barkas, W. J. 1874 D, 550.
Giebel, C. G. 1855 A, 114.
Heilprin, A. 1887 A, 301.
Huxley, T. H. 1861 D, 431, 436.
Lohest, M. 1888 A, 116.
Mantell, G. A. 1844 A, 653.
Owen, R. 1845 B, 171.
1866 A, 367, figs. 245, 246.
Röse, C. 1897 A, 49, 61.
Rohon, J. V. 1889 B, 3, pls. i, ii; text-fig. ii.
Stensiö, E. A. 1918 A, 116.
Tomes, C. S. 1898 C, 347.
Traquair, R. H. 1880 A, 149, 157.

Dendrodus arisaigensis Whiteaves.

Hay, O. P. 1902 A, 359.
Eastman, C. R. 1907 B, 13.
1908 A, 276.
Lambe, L. M. 1904 C, 15, 33, 42.
1912 A, 3.
Silurian or Lower Devonian (Arisaig); Nova Scotia.

ERIPTYCHIUS Walcott. Type *E. americanus* Walcott.

Hay, O. P. 1902 A, 359.
Clarke, J. M. 1895 A, 121 ("fossil fishes").
Jordan, D. S. 1905 A, I, 578; II, 568.
Stromer, E. 1920 A, 10, 11.
Vaillant, L. 1902 A, 1321 ("poissons").
Walcott, C. D. 1891 A, 245 ("fish").

Eriptychius americanus Walcott.

Hay, O. P. 1902 A, 359.
Cockerell, T. D. A. 1908 C, 162.
Eastman, C. R. 1907 B, 12.
Jaekel, O. 1892 C, 168 ("fish remains").
1895 D, 162.
Jordan, D. S. 1907 B, 229.
Merrill, G. P. 1907 A, 11.
Ordovician; Colorado.

MEGALICHTHYIDÆ Hay.

Unless otherwise indicated, the writers, as cited, use the name Rhizodontidæ.
Hay, O. P. 1902 A, 359 (Megalichthyidæ).
Abel, O. 1919 A, 165.
Allis, E. P. 1922 A, 149.
Arldt, T. 1912 A, 648, 650.
Bridge, T. W. 1904 A, 478.
Dean, Gudger, Henn 1923 A, 622.
Dollo, L. 1896 A, 91.
Eastman, C. R. 1907 B, 23.
Goodrich, E. S. 1904 A, 500.
1909 A, 285.
Gregory, W. K. 1907 D, 448.
1915 D, 326.
Jordan, D. S. 1905 A, i, 603, ii, p. 580 (Megalichthyidæ).
1907 B, 229, 760 (Megalichthyidæ).
1923 A, 108 (Megalichthyidæ).
Schlosser, M. 1917 A, 133 ("rhizodontiden").
Schmalhausen, J. J. 1913 A, 55.
Stensiö, E. A. 1918 A, 117.
Traquair, R. H. 1900 C, 505.
Zittel and Koken 1911 A, 86.
Zittel and Schlosser 1923 A, 85 (Rhizodontidæ).
Zittel and Woodward 1902 A, 70.

MEGALICHTHYS Agassiz and Hibbert. Type *M. hibberti* Agassiz and Hibbert.

Hay, O. P. 1902 A, 359.
Agassiz, L. 1835 A, 646 (Megalichthys; descript. insufficient).
1835 C, 58.
1835 D, 190.
1844 C, 269.
Bronn, H. G. 1848 A, 709.
Case, E. C. 1917 A, 125 (Rhizodus).
Connell, A. 1835 A, 302.
1835 B, 191.
Goodrich, E. S. 1908 A, 755, fig. 197.
Gregory, W. K. 1915 D, 326 (Rhizodus).
Humphreys, J. 1908 A, 12 (Rhizodus).
Jordan, D. S. 1919 B, 185.
1923 A, 108.
Murchison, R. I. 1854 A, 281.
Stevenson, J. J. 1907 A, 168 (Rhizodus).
Traquair, R. H. 1878 C, 444 (Rhizodus).
1878 D, 657 (Rhizodus).
1880 A, 142, 149 (Rhizodus).
1908 A, 104 (Rhizodus).
Watson, D. M. S. 1913 F, 957 (Rhizodus).
Woodward, A. S. 1890 F, 147 (Rhizodus).
1911 C, p. 46 (Rhizodus).
1915 B, lxxi (Rhizodus).
Young, J. 1866 C, 317 (Rhizodus).
Zittel and Koken 1911 A, 86 (Rhizodus).
Zittel and Schlosser 1923 A, 86, fig. 146 (Rhizodus).
Zittel and Woodward 1902 A, 70 (Rhizodus).

Megalichthys anceps (Newb.).

Hay, O. P. 1902 A, 360.
Hussakof, L. 1908, 58 (Rhizodus).
Mississippian (St. Louis); Illinois.

Megalichthys angustus (Newb.).

Hay, O. P. 1902 A, 360. Pennsylvanian; Ohio.

Megalichthys incurvus (Newb.).

Hay, O. P. 1902 A, 360. Pennsylvanian; Ohio.

Megalichthys lancifer (Newb.).

Hay, O. P. 1902 A, 360.
Lambe, L. M. 1904 C, 19, 35, 43 (Rhizodus. This species?).
Whiteaves, J. F. 1903 B, 29 (Rhizodus. This species?).
Coal Measures; Nova Scotia.

Megalichthys ornatus (Traquair).

Traquair, R. H. 1878 D, 659 (Rhizodus).
Cockerell, T. D. A. 1913 A, 246 (Rhizodus. This species?).
Miall, L. C. 1875 B, 624, fig. ("Rhizodus").
Traquair, R. H. 1875 B, 266 (Rhizodus hibberti).
Woodward, A. S. 1891 A, 346, pl. xii, figs. 1-4 (Rhizodus).
Young, J. 1866 B, 599 ("Rhizodus").
Ordovician; Colorado.

Megalichthys sp. indet.

Bell, W. A. 1913 A, 343 (Rhizodus). Pennsylvanian (Joggins); Nova Scotia.

STREPSODUS Young. Type *Holoptychius sauroides* Binney; not of Williamson.

Hay, O. P. 1902 A, 360.
Leriche, M. 1908 B, 270.
Stensiö, E. A. 1918 A, 118.
Wellburn, E. D. 1900 C, 86, pl. xviii.
Zittel and Woodward. 1902 A, 71.

Strepsodus arenosus Hay.

Hay, O. P. 1902 A, 360.
Merrill, G. P. 1907 A, 20.
Mississippian; Pennsylvania.

Strepsodus dawsoni Hay.

Hay, O. P. 1902 A, 360.
Lambe, L. M. 1904 C, 19, 35, 43.
Pennsylvanian; Nova Scotia.

Strepsodus hardingi (Dawson).

Hay, O. P. 1902 A, 360.
Lambe, L. M. 1904 C, 18, 34, 43.
1910 B, 14 (This species?).
1909 B, 177 (Rhizodus).
Woodward, A. S. 1900 E, 203.
1902 D, 203.
Mississippian (Albert); Nova Scotia.

Strepsodus sp. indet.

Eastman, C. R. 1907 B, 21. Devonian; New York or Pennsylvania.
1908 A, 288. Devonian; New York or Pennsylvania.

RHIZODOPSIS Young. Type *Holoptychius sauroides* Williamson.

Hay, O. P. 1902 A, 360.
Allis, E. P. 1919 B, 75.
Atthey, T. 1868 C, 349, 364.
Broom, R. 1913 A, 461.
Gregory, W. K. 1913 D, 806.
1927 G, 268, fig. 1.
Jordan, D. S. 1919 B, 344.
Stensiö, E. A. 1921 A, 131.
Traquair, R. H. 1878 C, 444.
1900 C, 505.
Watson, D. M. S. 1913 F, 957.
1916 B, 12, pl. i, fig. 2; text-figs. 3, 4.
Watson and Day 1916 A, 12, 24; text-figs. 3, 4.
1926 A, 250.
Wills, L. J. 1916 A, 19.
Woodward, A. S. 1898 B, 74, 124, fig. 57.
Zittel and Koken 1911 A, 86.
Zittel and Schlosser 1923 A, 86, fig. 147.
Zittel and Woodward 1902 A, 71.

Rhizodopsis? mazonius Hay.

Hay, O. P. 1902 A, 361.
Eastman, C. R. 1902 B, 97 (This genus?).
1902 G, 541 (This genus?).
1903 B, 194 (This genus?).
Merrill, G. P. 1907 A, 18.
Pennsylvanian (Mazon Creek); Illinois.

SAURIPTERIS Hall. Type *S. taylori* Hall.

Hay, O. P. 1902 A, 361.
Broom, R. 1913 A, 463, fig. 6.
Dean, Gudger, Henn 1923 A, 550 (Sauripterus).
Eastman, C. R. 1917 A, 252.
Gregory, W. K. 1911 A, 509.
1912 D, 220.
1913 D, 807 (Sauripterus).
1914 C, 267.
1915 D, 353, fig. 11.
Gregory, Miner, and Noble 1923 A, 279.
Jordan, D. S. 1919 B, 214.
Kingsley, J. S. 1925 A, 244, fig. 258.
Lydekker, R. 1914 A, 652.
Sewertzoff, A. N. 1926 D, 83, fig. 11 (Sauripterus).
Stensiö, E. A. 1918 A, 118 (Sauripterus).
Wills, L. J. 1916 A, 19.
Zittel and Koken 1911 A, 87.
Zittel and Schlosser 1923 A, 86, fig. 30.
Zittel and Woodward 1902 A, 71 (Gyroptychius).

Sauripteris taylori Hall.

Hall, J. 1843 A, 282, pl. iii, figs. 1-3; text-figs. 130, 131.
Hay, O. P. 1902 A, 361.

Broom, R. 1913 A, 461, figs. 2-5.
1913 H, 76, figs. 3, 4.
Claypole, E. W. 1883 C, 279 (Bothriolepis).
1903 A, 320.
Eastman, C. R. 1907 B, 22, 166.
1908 A, 238, 290.
1917 A, 252, pl. ii, fig. 2; pl. vii, fig. 5; text-figs. 6, 7.
Gregory, W. K. 1915 D, 360, pl. iv; text-fig. 9.
Hussakof, L. 1908 A, 58, figs. 27, 28.
Hussakof and Bryant 1919 A, 180.
Lull, R. S. 1917 B, 488, fig. 141.
Moodie, R. L. 1915 G, 371.
Upper Devonian (Catskill); Pennsylvania.

EUSTHENOPTERON Whiteaves. Type *E. foordii* Whiteaves.

Whiteaves, J. F. 1881 C, 30.
Hay, O. P. 1902 A, 361.
Allis, E. P. 1923 A, 50.
Bridge, T. W. 1904 A, 479, 740.
Broom, R. 1913 A, 459, fig. 1.
Bryant, W. L. 1919 A, 1.
Dean, Gudger, Henn 1923 A, 461, 551, 622.
Dollo, L. 1896 A, 91.
Frech, F. 1897 A, 123 (Eustenopteron).
Goodrich, E. S. 1901 A, 311.
1904 A, 500.
1908 A, 766.
1909 A, 509.
1924 A, 936.
Gregory, W. K. 1911 A, 509.
1913 D, 807.
1915 D, 353, fig. 11.
1920 A, 219.
Gregory, Miner, and Noble 1923 A, 279.
Jordan, D. S. 1920 C, 418 (Eusthenopleuron).
1923 A, 108.
Kiaer, J. 1924 A, 93, 111, fig. 40.
Lydekker, R. 1914 A, 652.
Moodie, R. L. 1915 H, 643.
Petronievics, B. 1918 B, 471, figs. 1, 2.
Pompeckj, J. F. 1913 A, 1136.
Regan, C. T. 1904 A, 336.
Romer, A. S. 1922 B, 541, 544.
Schmalhausen, J. J. 1913 A, 54.
1913 B, 757.
Sewertzoff, A. N. 1925 A, 277.
Stensiö, E. A. 1921 A, 129, 133.
1925 A, 68.
1925 B, 145.
Sushkin, P. P. 1910 A, 251.
1927 A, 264, 265, 280.
Thevenin, A. 1910 A, 37.
Traquair, R. H. 1900 C, 505.
Watson, D. M. S. 1913 D, 26.
1916 B, 25.
1917 B, 61 (Euthenopteron).
1925 A, 846, 847.
Watson, D. M. S. 1926 A, 195, 248, figs. 4, 5, 34, 35.
Watson and Day 1916 A, 23.
Watson and Gill 1923 A, 215.
Whiteaves, J. F. 1907 B, 253.
1908 A, 105.
Woodward, A. S. 1922 B, 29.
Zittel and Koken 1911 A, 87.
Zittel and Schlosser 1923 A, 86, fig. 30*a*.

Eusthenopteron foordii Whiteaves.

Whiteaves, J. F. 1881 C, 30.
Hay, O. P. 1902 A, 361.
Abel, O. 1919 A, 166, fig. 124.
Bridge, T. W. 1904 A, 479, fig. 276.
Broom, R. 1922 B, 459, fig. 7.
Bryant, W. L. 1919 A, 1-23, pls. i-xviii.
Clarke, J. M. 1913 A, 113.
Claypole, E. W. 1883 C, 278.
Eastman, C. R. 1907 B, 17.
1908 A, 280.
Goodrich, E. S. 1901 A, 311, pl. xvi; text-fig. F.
1909 A, 509, figs.
Gregory, W. K. 1915 D, 359, fig. 8.
1922 A, 535, figs. 3-5.
Hussakof, L. 1912 B, 131, fig. 2.
Hussakof and Bryant 1919 A, 176, pl. lxx, fig. 2.
Jaekel, O. 1909 D, 719, fig. 11.
1911 A, 76, fig. 78.
Lambe, L. M. 1904 C, 14, 34, 43.
1912 A, 5.
Moodie, R. L. 1913 A, 255.
Oswald, F. 1911 A, 407, fig. 8.
Pehrson, T. 1922*A, 55, fig. 22 (E. fordii).
Rogers, A. F. 1924 A, 546.
Schmalhausen, J. J. 1913 A, 54.
Stensiö, E. A. 1921 A, 133, fig. 57.
1922 A, 1249, fig. 4 (E. fordi).
Watson and Day 1916 A, 19.
Whiteaves, J. F. 1907 B, 254.
Woodward, A. S. 1922 B, 30, fig. 2.
Upper Devonian (Scaumenac); Quebec.

RABDIOLEPIS Emmons. Type *R. speciosa* Emmons.

Hay, O. P. 1902 A, 360.
Deecke, W. 1913 A, 72 (Rhabdolepis).
Jordan, D. S. 1919 B, 275.
Tornquist, A. 1904 A, 349 (Rhabdolepis).

Rabdiolepis speciosa Emmons.

Hay, O. P. 1902 A, 360.
Hawkins, A. C. 1914 A, 153 (Radiolepis).
Lyman, B. S. 1894 A, 212 (Radiolepis).
Triassic (Newark); North Carolina, Pennsylvania.

CŒLOSTEUS Newb. Type *C. ferox* Newb.

Hay, O. P. 1902 A, 361.
Belongs possibly among the sharks and rays.

Cœlosteus ferox Newb.

Hay, O. P. 1902 A, 361.
Hussakof, L. 1908 A, 29.
Mississippian (St. Louis); Illinois.

OSTEOLEPIDIDÆ Cope.

Cope, E. D. 1889 R, 856 (Osteolepididæ).
Hay, O. P. 1902 A, 361 (Osteolepidæ).
Abel, O. 1919 A, 161 (Osteolepidæ).
Allis, E. P. 1919 A, 378 (Osteolepidæ).
1919 B, 76 (Osteolepidæ).
Arldt, T. 1907 D, 679 (Rhombodipterini).
1912 A, 648, 658 (Osteolepidæ).
1923 A, 491 ("osteolepiden").
Bridge, T. W. 1904 A, 477 (Osteolepidæ).
Case, E. C. 1926 B, 196 (Osteolepidæ).
Dean, Gudger, Henn 1923 A, 401, 622 (Osteolepidæ).
Dollo, L. 1896 A, 91 (Osteolepidæ).
Goodrich, E. S. 1904 A, 499 (Osteolepidæ); 500 Glyptopomidæ).
1908 A, 760, 765 (Osteolepidæ).
1909 A, 285 (Glyptopomidæ).
1919 A, 181 (Osteolepidæ).
Gregory, W. K. 1912 D, 220 (Osteolepida).
1915 D, 326, 355 (Osteolepidæ).
Huxley, T. H. 1861 D, 431, 442 (Saurodipterini).
Jordan, D. S. 1905 A, i, 603 (Osteolepidæ).
1907 B, 229, 760 (Osteolepidæ).
1923 A, 109 (Osteolepidæ).
Lütken, C. 1871 A, 290 ("rhombodipteriens").
Pompeckj, J. F. 1913 A, 1135, 1136 (Osteolepidæ); 1137 (Glyptopomidæ).
Rosén, N. 1916 A, 17 ("osteolepidote").
Schlosser, M. 1917 A, 133 ("osteolepiden").
Steinmann, G. 1927 A, 77 ("osteolepiden").
Stensiö, E. A. 1918 A, 117 (Osteolepidæ).
Stromer, E. 1905 H, 216 (Osteolepidæ).
Sushkin, P. 1927 A, 264 ("osteolepids").
Traquair, R. H. 1900 C, 505 (Osteolepidæ).
Watson, D. M. S. 1914 F, 780 ("osteolepids").
1921 A, 333 ("osteolepids").
1925 A, 816-868 ("osteolepids").
1926 A, 195, 243, figs. 1-3 ("osteolepids").
Watson and Day 1923 A, 210 ("osteolepids").
Zittel and Koken 1911 A, 87 (Osteolepidæ).
Zittel and Schlosser 1923 A, 87 (Osteolepidæ).
Zittel and Woodward 1902 A, 71 (Osteolepidæ).

OSTEOLEPIS Valenciennes. Type *O. macrolepidotus* Agassiz.

Valenciennes, A. 1829, Trans. Geol. Soc. Lond. (2), iii, 144.
Abel, O. 1919 A, 162, fig. 118.
1920 A, 339, fig. 537.
Agassiz, L. 1833 A, 472.
Allis, E. P. 1919 B, 75.
1922 B, 239.
Bryant, W. L. 1919 A, 6, 8.
Egerton, P. G. 1852 C, 6 L, 5.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1919 A, 181, figs. 1-6.
1924 A, 935.
Gregory, W. K. 1913 D, 806.
1919 B, 422, fig. 1.
1920 A, 111, 219, figs. 1, 2.
1922 A, 542, fig. 346.
Heilprin, A. 1887 A, 149, 301.
Huxley, T. H. 1861 D, 433, fig. 8.
Jaekel, O. 1903 F, 37.
Kiaer, J. 1915 A, 48, 55.
Kingsley, J. S. 1925 A, 103, fig. 110.
Klaatsch, H. 1890 A, 144, 220.
Miller, H. 1851 A, 91.
Osborn, H. F. 1916 E, 605, fig. 14.
1917 B, 170, fig.
Pehrson, T. 1922 A, 52.
Pompeckj, J. F. 1920 A, 110.
Rohon, J. V. 1889 A, 13, pl. ii.
Scupin, H. 1896 A, 153, pl. ix, fig. 1.
Steinmann, G. 1907 A, 409, fig. 715.
Stensiö, E. A. 1921 A, 133.
1922 A, 1258.
Traquair, R. H. 1880 A, 150, 151.
Watson, D. M. S. 1916 B, 20, text-fig. 5.
1921 A, 334.
1925 B, 385, fig. 1.
1926 A, 205, 242.
Watson and Day 1916 A, 20, text-fig. 5.
Woodward, A. S. 1891 A, 368.
1922 B. 28.
Zittel and Schlosser 1923 A, 87, fig. 148.

Osteolepis sp. indet.

Kiaer, J. 1915 A, 48. Upper Devonian; Ellesmere Land.

PARABATRACHUS Owen. Type *P. colei* Owen.

Hay, O. P. 1902 A, 362.
Bardeleben, K. 1907 A, 36 (Megalichthys).
Barkas, T. P. 1869 A, 43 (Parabatrachus, Megalichthys).
Bronn, H. G. 1849 A, 661 (Megalichthys).
Broom, R. 1913 H, 77 (Megalichthys).
Case, E. C. 1908 C, 579 (Ectosteorhachis).
Day, H. 1915 A, 430 (Megalichthys).
Gregory, W. K. 1913 D, 806 (Ectosteorachis, Megalichthys).
1915 D, 326, fig. 7 (Megalichthys).
Humphreys, J. 1908 A, 13 (Megalichthys).
Hussakof, L. 1911 A, 168 (Megalichthys).
Huxley, T. H. 1861 D, 433 (Megalichthys).
Jordan, D. S. 1905 A, i, 604.
1907 B, 230.
1919 B, 254.
Lakjer, T. 1927 A, 210 (Megalichthys).
M'Coy, F. 1848 A, 3 (Centrodus; not of Giebel, 1847).
Owen, R. 1845 B, 76 (Megalichthys).
1876 E, 45.
Rosén, N. 1916 A, 16, fig. 8 (Megalichthys).
Schlosser, M. 1917 A, 133.
Stensiö, E. A. 1921 A, 131 (Megalichthys).
Sushkin, P. P. 1927 A, 265, 280, fig. 2 (Megalichthys).
Watson, D. M. S. 1912 A, 5 (Megalichthys).
1913 F, 957 (Megalichthys).
1921 A, 334 (Megalichthys).
1926 A, 242, 245, figs. 32, 33, 36-39 (Megalichthys).
Woodward, A. S. 1911 C, 46 (Megalichthys).
1915 B, lxxi (Megalichthys).
1924 A, 116, fig. 8.
Zittel and Schlosser 1923 A, 87 (Megalichthys).
Zittel and Woodward 1902 A, 71 (Megalichthys).

Parabatrachus ciceronius (Cope).

Hay, O. P. 1902 A, 362.
Beede, J. W. 1907 A, 119.
Case, E. C. 1915 A, 96 (Megalichthys).
Hussakof, L. 1911 A, 169 (Megalichthys).
Permian (Wichita? Clear Fork?); Texas.

Parabatrachus macropomus (Cope).

Hay, O. P. 1902 A, 362.
Eastman, C. R. 1903 B, 187 (Megalichthys).
Merrill, G. P. 1907 A, 13 (Megalichthys).
Pennsylvanian; Kansas.

Parabatrachus maxillaris (Agassiz).

Hay, O. P. 1902 A, 362.
Etheridge, R. 1878 A, 269 (Megalichthys hibberti).
Goodrich, E. S. 1909 A, 217, fig. 190 (Megalichthys hibberti).
Lambe, L. M. 1904 C, 19, 35, 43.
Pennsylvanian; Nova Scotia.

Parabatrachus nitidus (Cope).

Hay, O. P. 1902 A, 362.
Beede, J. W. 1907 A, 119.
Case, E. C. 1915 A, 96 (Megalichthys).
Cope and Matthew 1915 A, pl. i (Ectosteorhachis; Megalichthys=Palæobatrachus).
Gregory, W. K. 1915 D, 360 (Megalichthys).
Hussakof, L. 1908 A, 58.
1911 A, 169, pl. xxx, figs. 1-4; pl. xxxi, fig. 3; text-fig. 53 (Megalichthys).
Permian (Wichita); Texas.

GLYPTOPOMUS Agassiz. Type *G. minor* Agassiz.

Hay, O. P. 1902 A, 362.
Abel, O. 1919 A, 53, fig. 26.
Allis, E. P. 1919 B, 76.
1922 B, 239.
Bryant, W. L. 1919 A, 8.
Goodrich, E. S. 1904 A, 500.
1909 A, 510, figs.
Huxley, T. H. 1859 E, 444.
1861 D, 424, fig. 4.
1866 B, 20, pl. i.
Pompeckj, J. F. 1913 A, 1136.
Rosén, N. 1916 A, 17.
Stensiö, E. A. 1918 A, 120.
1921 A, 133.
Suschkin, P. P. 1927 A, 264.
Watson, D. M. S. 1916 B, 8, pl. i, figs. 4, 5; text-fig. 2.
Watson and Day 1916 A, 8, 21, pl. i, figs. 4, 5; text-fig. 2.
Woodward, A. S. 1890 F, 147.
Zittel and Koken 1911 A, 87.
Zittel and Schlosser 1923 A, 87.

Glyptopomus sayrei Newb.

Hay, O. P. 1902 A, 362.
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 22.
1908 A, 290.
Upper Devonian (Catskill); Pennsylvania.

SPERMATODUS Cope. Type *S. pustulosus* Cope.

Cope, E. D. 1894 F, 438.
Hay, O. P. 1902 A, 795.
Hussakof, L. 1911 A, 172.
The systematic position of this genus is extremely doubtful.

Spermatodus pustulosus Cope.

Cope, E. D. 1894 F, 438, text-fig. 4.
Hay, O. P. 1902 A, 795.
Case, E. C. 1915 A, 96.
Hussakof, L. 1908 A, 101.
1911 A, 172, pl. xxxii.
Permian (Wichita? Clear Fork?); Texas.

ONYCHODONTIDÆ Woodward.

Hay, O. P. 1902 A, 362.
Abel, O. 1919 A, 166.
Eastman, C. R. 1907 B, 23, 168.
1908 A, 240.
Goodrich, E. S. 1909 A, 286.
Jordan, D. S. 1907 B, 230, 760.
1923 A, 109.
Zittel and Koken 1911 A, 87.
Zittel and Schlosser 1923 A, 87 (Onychodidæ).

ONYCHODUS Newberry. Type *O. sigmoides* Newb.

Hay, O. P. 1902 A, 363.
Barkas, W. J. 1874 D, 551.
Bryant, W. L. 1919 A, 11.
Claypole, E. W. 1903 A, 312.
Eastman, C. R. 1902 B, 157.
1907 B, 164, 168, 193, 232.
1908 A, 240.
Hussakof and Bryant 1919 A, 178.
Jaekel, O. 1900 A, 145.
1906 B, 76.
1927 B, 338.
Newberry, J. S. 1870 E, 18.
1873 G, 145.
Norton, W. H. 1906 A, 357.
Storms, R. 1891 A, 143, 145.
Traquair, R. H. 1898 A, 68.
Weller, S. 1902 A, 427, 429.
Woodward, A. S. 1889 K, 407.
1890 F, 147.

Onychodus hopkinsi Newb.

Hay, O. P. 1902 A, 363 (O. sigmoides, in part).
Claypole, E. W. 1903 A, 320.
Eastman, C. R. 1907 B, 169, 230, pl. iii, fig. 3.
1908 A, 241, pl. i, fig. 3.
Upper Devonian (Chemung, Marcellus); New York.

Onychodus ortoni Newb.

Hay, O. P. 1902 A, 363.
Claypole, E. W. 1896 B, 353.
1903 A, 320.
Eastman, C. R. 1907 B, 19.
1908 A, 285.
Zittel and Koken 1911 A, 88, fig. 157.
Zittel and Schlosser 1923 A, 88, fig. 151.
Upper Devonian (Huron); Ohio.

Onychodus sigmoides Newb.

Hay, O. P. 1902 A, 363.
Arey, M. F. 1906 A, 425, fig. 48.
Branson, E. B. 1922 A, 35, 164, pl. xxxi, fig. 3.
Clarke and Luther 1904 A, 42.
Claypole, C. W. 1903 A, 320.
Cleland, H. F. 1911 A, 157, pl. xlvii, fig. 5 (This species?).
Eastman, C. R. 1907 B, 14, 16, 168, 232, pl. i, fig. 3.
1908 A, 240, 279.
Hussakof, L. 1908 A, 57.
Hussakof and Bryant 1919 A, 10, 15, 17, 178, pl. lviii; text-fig. 59.
Lambe, L. M. 1904 C, 16, 34, 43.
1912 A, 4.
Moodie, R. L. 1926 A, 66.
Newberry, J. S. 1874 H, 192.
Newberry, J. S. 1889 A, 56, pl. xxxiv.
Orton, E. 1878 A, 610, 625 (O. sigmoides); 636 (O. hopkinsi).
Stauffer, C. R. 1909 A, 88, 124, 169.
Whiteaves, J. F. 1877 A, 319.
Zittel and Koken 1911 A, 88, fig. 156.
Zittel and Schlosser 1923 A, 87, fig. 150.
Upper Devonian (Genesee); New York: Middle Devonian (Hamilton); Wisconsin: (Callaway); Missouri: (Cedar Valley); Iowa: (Columbus and Delaware); Ohio: (Onondaga); New York: (Corniferous); Ontario.

Onychodus sp. indet.

Hay, O. P. 1902 A, 363.
Eastman, C. R. 1907 B, 16, 169. Middle Devonian (Cedar Valley); Iowa; pl. iii, fig. 2 (O. sigmoides?): Devonian (Hamilton); New York.
1908 A, 241, 279. Devonian; Wisconsin, New York.
Lambe, L. M. 1904 C, 34. Devonian (Cuboides); Manitoba.
Norton, W. H. 1906 A, 356. Middle Devonian (Cedar Valley); Iowa.
Teller, E. E. 1911 A, 271. Devonian (Hamilton); Wisconsin.
Tyrrell, J. B. 1892 A, 209. Upper Devonian; Manitoba.

Order ACTINISTIA Cope.

Hay, O. P. 1902 A, 363.
Cope, E. D. 1871 T, 451.
1891 N, 19.
Eastman, C. R. 1908 A, 69, 241.
1908 B, 357.
1911 A, 20.
Goodrich, E. S. 1909 A, 287 (Cœlacanthini).
1913 A, 83 (Cœlacanthini).
Gregory, W. K. 1907 D, 448.
1920 A, 220.
Jordan, D. S. 1905 A, i, 602, 604.
1907 B, 228, 230, 760.
Sewertzoff, A. N. 1923 B.

CŒLACANTHIDÆ King.

King, W. 1850 A, 235.
Hay, O. P. 1902 A, 363.
Abel, O. 1912 F, 445 456 ("cœlacanthiden").
1919 A, 167.
Agassiz, L. 1844 D, 142 ("cœlacanthes").
Allis, E. P. 1919 A, 376.
1922 A, 149.
1923 A, 41, 51.
Arldt, T. 1907 D, 646 (Cœlacanthini).
1912 A, 662, 663.
1923 A, 491 ("cœlacanthiden").
Boulenger, G. A. 1902 B, 296, 298.
Bridge, T. W. 1904 A, 480.
Bronn, H. G. 1849 A, 781, seq. (Cœlacanthi).
Carus, V. 1875 A, 593 (Cœlacanthini).
Cockerell, T. D. A. 1913 B, 120.
Cope, E. D. 1891 N, 19.
Cunningham, J. T. 1912 A, 258.
Dean, Gudger, Henn 1923 A, 460, 551, 622.
Deecke, W. 1926 A, 194 ("cœlacanthiden").
Eastman, C. R. 1905 B, 101.
1908 A, 242.
1911 A, 28, 42.
Egerton, P. G. 1854 A, 369 (Cœlacanthi).
Fitzinger, L. J. 1873 A, 50 (Cœlacanthi).
Goodrich, E. S. 1901 A, 316.
1904 A, 501 (Cælacanthidæ).
Goodrich, E. S. 1908 A, 766.
1909 A, 290.
Gregory, W. K. 1907 D, 448.
Günther, A. C. 1872 A, 559 ("cœlacanths").
Hay, O. P. 1901 B, 72.
Hoernes, R. 1886 A, 551.
Huxley, T. H. 1861 D, 435, 440, 444 (Cœlacanthini).
1862 A, L ("cœlacanths").
1866 B, 24, 63 (Cœlacanthini).
Jaekel, O. 1906 B, 76 ("cœlacanthiden").
Jordan, D. S. 1905 A, i, 605.
1907 B, 760.
1923 A, 109.
Kiaer, J. 1924 A, 111 (Cœlacanthini).
Klaatsch, H. 1890 A, 221 ("cœlacanthinen").
Lütken, C. 1868 C (Cœlacanthi).
1871 A, 291 ("célacanthiens").
Owen, R. 1860 E, 131 (Cœlacanthi).
Pehrson, T. 1922 A, 40 ("cœlacanths").
Pompeckj, J. F. 1913 A, 1135, 1136.
Schlosser, M. 1917 A, 133, 134, 136, 138, 139 ("cœlacanthiden").
Schmalhausen, J. J. 1913 A, 55.
Sewertzoff, A. N. 1923 B (Cœlacanthini).
1922 B, 167 ("cœlacanthiden").
Steinmann, G. 1927 A, 12 ("cœlacanthiden").

Stensiö, E. A. 1918 A, 120 ("cœlacanthids").
1921 A, 43, 120.
1922 A, 1259 ("cœlacanthids").
1925 A, 65, 68, 176, 182 ("cœlacanthids").
1925 B, 162, 172.
1927 A, 32.
Stromer, E. 1925 B, 356 (Cœlacanthini).
Traquair, R. H. 1880 A, 158.
1900 C, 505.
1905 A, 85.
Watson, D. M. S. 1921 A, 333 ("cœlacanths").
Watson, D. M. S. 1925 A, 847, 849 ("cœlacanths").
1926 A, 200, 245 ("cœlacanths").
1927 A, 454 ("cœlacanths").
Whitehouse, R. H. 1910 B, 609.
Woodward, A. S. 1898 A, 78.
1922 B, 28 ("cœlacanths").
1922 C, 83.
Zittel and Koken 1911 A, 88.
Zittel and Schlosser 1923 A, 88.
Zittel and Woodward 1902 A, 72.
Zograf, N. 1887 A, 70 (Cœlacanthi).

Cœlacanthus Agassiz. Type *C. granulatus* Agassiz.

Hay, O. P. 1902 A, 363.
Alessandri, G. 1910 A, 37.
Arldt, T. 1923 A, 491.
Barkas, W. J. 1874 D, 549 (Cœlacanthus); 550 (Conchiopsis).
Bridge, T. W. 1904 A, 736.
Bronn, H. G. 1848 A, 318.
1849 A, 655.
Case, E. C. 1917 A, 125.
Cockerell, T. D. A. 1913 B, 121.
Davis, J. W. 1880 C, 60, 67.
Dean, Gudger, Henn 1923 A, 461, 622.
Deecke, W. 1913 A, 80.
Dollo, L. 1896 A, 91.
Dormitzer, M. 1852 A, 61.
Eastman, C. R. 1903 B, 189.
1908 A, 244, 246.
1908 B, 357.
1915 B, 440.
1917 A, 270.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1908 A, 766.
1909 A, 289.
Heckel, J. J. 1850 A, 362, 365.
Heilprin, A. 1887 A, 301, 302.
Huxley, T. H. 1861 D, 435, 437.
1862 A, li.
1866 B, 23, pls. ii-v.
Jaekel, O. 1903 A, 119.
Jordan, D. S. 1905 A, II, 604.
1907 B, 231.
Lütken, C. 1868 C, 56, fig. 9.
Osburn, R. C. 1907 A, 425.
Priem, F. 1908 B, 5.
Reis, O. M. 1900 A, 187.
Stensiö, E. A. 1921 A, 44, 120.
Traquair, R. H. 1880 A, 158.
1905 A, 85.
Watson, D. M. S. 1921 A, 333.
1926 A, 199, 245.
Wellburn, E. D. 1901 A, 71.
1901 B, 161.
1902 A, 474, fig.
Woodward, A. S. 1898 G, 529, fig.
Zittel and Koken 1911 A, 88.
Zittel and Schlosser 1923 A, 88.
Zittel and Woodward 1902 A, 72.

Cœlacanthus banffensis Lambe.

Lambe, L. M. 1916 B, 38, pl. i.
Raymond, P. E. 1925 B, 553.
Triassic? (Upper Banff); Alberta.

Cœlacanthus elegans Newb.

Hay, O. P. 1902 A, 364.
Eastman, C. R. 1917 A, 271, pl. ix, figs. 5, 6; pl. xi, figs. 3, 4.
Hussakof, L. 1908 A, 54, pl. iv, fig. 1.
Hussakof and Bryant 1919 A, 181.
Jordan, D. S. 1907 B, 230, fig. 164.
Reis, O. M. 1900 A, 191.
Pennsylvanian; Ohio.

Cœlacanthus exiguus Eastman.

Eastman, C. R. 1902 G, 538, 541, fig. 3.
Eastman, C. R. 1902 B, 97.
1903 B, 189, 194, pl. v, fig. 48.
1917 A, 271, pl. x, fig. 1.
Pennsylvanian (Mazon Creek); Illinois.

Cœlacanthus ornatus Newb.

Hay, O. P. 1902 A, 364.
Eastman, C. R. 1917 A, 271.
Hussakof, L. 1908 A, 54, pl. iv, fig. 2.
Pennsylvanian; Ohio.

Cœlacanthus robustus Newb.

Hay, O. P. 1902 A, 364.
Cockerell, T. D. A. 1913 B, 120.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
Pennsylvanian (Illinois); Ohio.

Cœlacanthus welleri Eastman.

Eastman, C. R. 1908 B, 358, fig. 1.
Alessandri, G. 1910 A, 37.
Eastman, C. R. 1908 A, 247, pl. iii, fig. 7; text-fig. 36.
1911 A, 44.
1917 A, 270.
Van Tuyl, F. M. 1925 A, 55, 62.
Mississippian (Kinderhook); Iowa.

Cœlacanthus sp. indet.

Eastman, C. R. 1908 C, 255. Mississippian (Kinderhook); Iowa.

Diplurus Newb. Type *D. longicaudatus* Newb.

Hay, O. P. 1902 A, 364.
Deecke, W. 1913 A, 74.
1926 A, 194.
Eastman, C. R. 1905 B, 101.
1911 A, 21, 44.
Stensiö, E. A. 1921 A, 45, 129.

Diplurus longicaudatus Newb.

Hay, O. P. 1902 A, 364.
Bayley, Kümmel and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 101.
1911 A, 28, 44.
Hussakof, L. 1908 A, 55.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 209, 214.
Woodward, A. S. 1890 E, 367.
Triassic (Newark); New Jersey.

PEPLORHINA Cope. Type *P. anthracina* Cope.

Hay, O. P. 1902 A, 364.
Barkas, W. J. 1874 D, 552.
Jordan, D. S. 1919 B, 368.
Hussakof, L. 1911 A, 170.
Pennsylvanian; Ohio.

Peplorhina anthracina Cope.

Hay, O. P. 1902 A, 364.

Peplorhina exanthematica Cope.

Hay, O. P. 1902 A, 364.
Pennsylvanian; Ohio.

TARRASIIDÆ Traquair.

Traquair, R. 1881 A, 61.
Abel, O. 1919 A, 163.
Jordan, D. S. 1923 A, 109.
Stensiö, E. A. 1921 A, 147.
Traquair, R. H. 1890 G, 494 (Tarrasius).
1891 A, 127.
Woodward, A. S. 1891 A, 317.
1898 A, 81 (Tarassius).
Zittel, K. A. 1890 A, 129.
Zittel and Schlosser 1923 A, 84 (Syn. of Cœlacanthidæ).

PALÆOPHICHTHYS Eastman. Type *P. parvulus* Eastman.

Eastman, C. R. 1908 A, 252.
1917 A, 272.
Jordan, D. S. 1923 A, 109.
Zittel and Schlosser 1923 A, 88.

Palæophichthys parvulus Eastman.

Eastman, C. R. 1908 A, 253, fig. 37.
1917 A, 272, pl. x, fig. 2.
Pennsylvanian (Mazon Creek); Illinois.

Subclass ACTINOPTERI Cope.

The literature of the Teleostomi is here included. The group Actinopteri is usually made to contain the Crossopterygia.

Cope, E. D. 1871 T, 449, 451.
Hay, O. P. 1902 A, 356 (Teleostomi); 364 Actinopteri).
Abel, O. 1912 A, 153 (Teleostomi).
1919 A, 183 (Actinopterygii).
1920 A, 336, 341 (Actinopterygii).
1921 A, 212 ("teleostomen").
1922 F, 73 ("teleostomen").
1926 C, 43 ("teleostomen").
Allis, E. P. 1913 A, 324 (Teleostomi).
1915 A (Teleostomi).
1918 B, 257 (Teleostomi).
1922 C, 2 (Teleostomi).
Arldt, T. 1923 A, 491 ("teleostomen").
Boas, J. E. V. 1914 B, 543 ("knochenfische").
Bonaparte, C. L. 1838 B, 131 (Teleostomi).
1848 A, 48 (Teleostomi).
Boulenger, G. A. 1901 D, 1 (Teleostomi).
Bridge, T. W. 1904 A, 475 (Teleostomi).
Cope, E. D. 1885 BB, 64 (Teleostomi).
1891 N, 10, 19, 21 (Teleostomi, in part; Actinopterygii).
Cunningham, J. T. 1897 A, 497 ("actinopterygians").
1912 A, 246 (Teleostomi).
Dean, B. 1896 D, 336 ("teleostomes").
1900 A, 22 (Teleostomi).
1916 A ("fishes").
Dean, Gudger, Henn 1923 A, 401 (Actinopterygii); 703 (Teleostomi).
Dietz, P. A. 1917 A, 87 ("teleostomen").
1921 A, 433 (Acanthopterygii).
Dollo, L. 1896 A, 85 ("téléostomiens").
Dollo, L. 1906 B, 137 ("actinoptérygiens").
Eastman, C. R. 1901 C, 329 (Actinopterygii).
1907 B, 23, 164, 170, 225, 234 (Teleostomi, Actinopterygii).
1908 A, 69, 255 (Actinopterygii); 66, 69 ("teleostomes").
1911 A, 20 (Teleostomi).
1912 A, 228 (Actinopterygii).
Fowler, H. W. 1911 A, 144.
Fürbringer, M. 1902 A, 195 ("teleostomen").
Gill, T. 1905 A, 658 (Teleostomi).
Goetsch, W. 1920 A, 10, 518 ("teleostomen").
Goodrich, E. S. 1904 A, 494 (Actinopterygii).
1908 A, 765 (Teleostomi).
1908 B, 546 (Actinopterygii).
1909 A, 302 (Actinopterygii).
1924 A, 935.
Gregory, W. K. 1907 D, 448, 457, 460 (Actinopteri); 447 (Teleostomi).
1915 D, 321, 345 (Actinopterygii).
1920 A, 220 (Actinopterygii).
1923 A, 238 (Actinopterygii).
Hase, A. 1907 A, 658 ("actinopterygier").
Hennig, E. 1912 A, 483 ("ganoiden," "teleostier").
Hertwig, O. 1892 A (Teleostomi).
Hubbs, C. L. 1919 A, 570 (Actinopterygii, Teleostomi).
1919 B (Actinopterygii).
Hubrecht, A. A. W. 1908 A, 150 (Teleostomi).
Huene, F. 1926 A, 260 ("teleostomen").
Hussakof, L. 1906 A, 124 (Teleostomi).
Jaekel, O. 1902, E, 1115 ("teleostomen").
1907 A, 186 (Teleostomata, Hypostomata).
1911 A, 66 (Teleostomata).
1919 A, 110 ("teleostomen").

Jaekel, O. 1928 A, 43 ("teleostomen").
Jordan, D. S. 1905 A, i, 598, 599; ii, 555, 595 (Teleostomi).
1907 B, 225, 246, 424, 760 (Teleostomi).
1923 A, 111.
Kerr, J. G. 1908 B, 174 (Teleostomi).
Kiaer, J. 1924 A, 104, 121 ("teleostomes").
Klein, E. F. 1879 A, 80 (Acanthopterygii).
1885 A, 118, 132, 199, 222 (Actinopterygii).
1886 A, 207, 236, 274 (Acanthopterygii).
Lönnberg, E. 1902 A (Teleostomi).
Meek, A. 1916 A, 35, 48 (Teleostomi).
Moodie, R. L. 1915 I, 139 ("actinopterygians").
1926 A, 84 (Actinopterygii).
Parker and Haswell 1897 A, 183 (Teleostomi).
Patten, W. 1912 A, 386 (Teleostomii).
Pompeckj, J. F. 1913 A, 1135 (Teleostomi); 1138 (Actinopterygii).
Priem, F. 1906 B, 264, figs. 1, 2 ("téléostomes").
1908 B, 5 ("actinoptérygiens," "téléostomes").
Regan, C. T. 1904 A, 329 (Teleostomi).
1906 A, 724 (Teleostomi).
1909 B, 75 (Teleostomi).
Schlosser, M. 1917 A, 147 (Teleostomi).
Schmalhausen, J. J. 1912 A, 558 (Teleostomi).
1913 A, 4 (Teleostomi).
1913 C (Teleostomi).
1923 A, 537, 542 (Teleostomi).
Sewertzoff, A. N. 1923 B (Actinopterygii, Teleostomi).
1926 A, 451, 535 ("teleostomes," "actinopterygians").
Sewertzoff, A. N. 1926 D, 90.
Shann, E. W. 1919 A, 532 (Teleostomi).
Starks, E. C. 1926 A, 91.
Steinmann, G. 1927 A, 74, 76 ("actinopterygier").
Stensiö, E. A. 1921 A, 137, 148 (Actinopterygii).
1925 A, *passim* (Actinopterygii); 40 ("teleostomes").
1925 B, 179, 188 (Teleostomi).
Stöhr, P. 1882 A, 71 ("teliostier").
Stromer, E. 1905 C, 184 (Teleostomi).
1912 A, 25, 48 (Teleostomi).
1925 B, 364 (Teleostomi).
Sushkin, P. P. 1910 A, 250 (Actinopterygii, Teleostomi).
1927 A, 264, 266 (Teleostomi).
Swinnerton, H. W. 1905 A, 374 (Teleostomi).
Traquair, R. H. 1900 C, 507 (Actinopterygii, Teleostomi).
Versluys, J. 1925 B, 182 ("teleostomen").
Watson, D. M. S. 1926 A, 201, 242 (Actinopterygii).
Whitehouse, R. H. 1910 B, 590 (Teleostomi).
Woodward, A. S. 1898 B, 69 (Teleostomi).
1901 A, v ("actinopterygian fishes").
1915 B, lxxii (Actinopterygii).
1922 C, 81, 84 (Teleostomi, Actinopterygii).
Woodward, H. 1904 B, 141 (Actinopterygii, Teleostomi).
Wright, W. 1909 A, 671 (Teleostomi).
Zittel and Koken 1911 A, 84 (Teleostomi); 89 (Actinopterygii).
Zittel and Schlosser 1923 A, 84 (Teleostomi); 89 ("Actinopterygii").

Superorder GANOIDEI Müller.

Müller, J. 1845 A, 137.
Agassiz, L. 1833 A, 470 ("ganoiden").
1835 B, 331 ("ganoides").
1835 I, 99 ("ganoidians").
1844 D, 139 ("ganoides").
1844 E, 332 ("ganoids").
1858 A, 9 ("ganoids").
Allis, E. P. 1922 C, 3.
1923 B, 132.
Arldt, T. 1907 D, 645.
Ayers, H. 1906 A, 77.
Bardeleben, K. 1896 A, 113 ("ganoiden").
Barrell, J. 1915 B, 418 ("ganoids").
Boas, J. E. V. 1914 B, 542 ("ganoiden").
Brandt, J. F. 1865 A, 15 ("ganoiden").
Braus, H. 1901 B, 201 ("ganoiden").
1906 A ("ganoiden").
Bronn, H. G. 1862 B, 380 ("ganoiden").
Carus and Engelmann 1861 A, 1740.
Cockerell, T. D. A. 1911 F, 367 ("ganoids").
Collinge, W. E. 1890 A, 499.
1895 D, 77 ("ganoids").
Cunningham, J. T. 1897 A, 492 ("ganoids").
Dana, J. D. 1863 B, 317 ("ganoids").
1863 C, 343 ("ganoids").
1863 D, 130, 131 ("ganoids").
Dean, B. 1896 D, 336 ("ganoids").
Dean, Gudger, Henn 1923 A, 621, 681.
Dollo, L. 1889 E, 152 ("ganoides").
1892 D, 120 ("ganoides").
1896 A ("ganoides").
Dohrn, A. 1884 A, 186 ("ganoiden").
Dormitzer, M. 1852 A, 61 ("ganoiden").
Drüner, L. 1902 A, 438 ("ganoiden").
Eastman, C. R. 1898 E, 181 ("ganoids").
Ebner, V. 1896 A, 146 ("ganoiden").
Egerton, P. G. 1854 A, 367.
Eggeling, H. 1906 A, 105 ("ganoiden").
Fitzinger, L. J. 1873 A, 49, 52.
Frassetto, F. 1915 A ("ganoidi").
Fürbringer, K. 1903 A, 377 ("ganoiden").
Gadow, H. 1896 A, 15 ("ganoids").
Ganin, M. 1880 A, 143.
1905 D, 830, 836, 899 ("ganoiden").
Gaupp, E. 1906 B ("ganoiden").
Gegenbaur, C. 1867 A, 56 ("ganoiden").
1867 B, 386 ("ganoiden").
1870 C, 442 ("ganoiden").
1879 A, 525 ("ganoiden").
Goette, A. 1901 A, 533, 552 ("ganoiden").
Gregory, W. K. 1904 A, 62.
1917 D, 625 ("ganoids").
Haeckel, E. 1893 A, xvi ("ganoiden").
Haller, G. 1924 A, 305 ("ganoiden").
Hase, A. 1907 A, 656 ("ganoiden").
Hasse, C. 1872 A, 419 ("ganoiden").
Hasse and Schwarck 1870 A, 30 ("ganoiden").
Hatschek, B. 1889 B, 113 ("ganoiden").
Heckel, J. 1850 A, 358 ("ganoiden").
1850 B, 143 ("ganoiden").
1851 A, 219 ("ganoiden").
Hoernes, R. 1886 A, 546.

Höfer, B. 1890 A, 103 ("ganoiden").
Howes, G. B. 1894 A, 87.
Hubbs, C. L. 1926 A, 73 ("ganoids").
Hubrecht, A. A. W. 1908 A, 153 ("ganoids").
Huxley, T. H. 1858 D, 515 ("ganoids").
1859 H, 33.
1863 F, 427.
1869 G, 452.
1876 E, 121.
1880 E, 471.
1881 A, 454 ("ganoids").
1883 B, 567 ("ganoids").
Jacobshagen, E. 1920 A, 88 ("ganoiden").
Jaekel, O. 1902 A, 107 ("ganoiden").
1926 B, 43 ("ganoiden").
1926 D, 71 ("ganoiden").
1927 A, 251 ("ganoiden").
Jordan, D. S. 1898 A, 176 ("ganoids").
1905 A, ii, 2, 571.
1907 B, 225, 247, 760.
1923 A, 111.
Kiaer, J. 1924 A, 111 ("ganoids").
Kingsley, J. S. 1925 A, 11, 32, 98, 236.
Klaatsch, H. 1890 A, 124, 182 ("ganoiden").
Kner, R. 1860 B, 818.
Laaser, P. 1903 A, 572 ("ganoiden").
Lakjer, T. 1927 A, 278.
Lavocat, A. 1885 A, 32 ("ganoids").
Ledouble, A. F. 1903 A, 645 ("ganoids").
Lütkin, C. 1868 C.
1871 A, 283 ("ganoids").
Martins, C. 1872 A, 307 ("ganoides").
Miller, H. 1851 A, 91 ("ganoids").
Osborn, H. F. 1916 E, 601 ("ganoids").
Parker, W. K. 1887 B, 54 ("ganoids").
Pehrson, T. 1922 A.
Philippi and Frech 1903 A, 11 ("ganoiden").
Puccioni, N. 1908 A, 56 ("ganoidei").
Reynolds, S. H. 1897 A, 542.
Röse, C. 1897 A, 60 ("ganoiden").
Sabatier, A. 1904 A, 249 ("ganoides").
Sagemehl, M. 1883 A ("ganoiden").
Salbey, R. 1868 A, 734 ("ganoiden").
Schauinsland, H. 1906 A, 427 ("ganoiden").
Schlosser, M. 1898 D, 120 ("ganoiden").
1917 A, 133, 137, 142, 146 ("ganoiden").
Schöne, G. 1902 A, 1 ("ganoiden").
Scupin, H. 1896 A, 145 ("ganoiden").
Sewertzoff, A. N. 1896 A, 273 ("ganoiden").
1897 A, 410 ("ganoiden").
1923 B.
1926 A.
Solger, B. 1880 B, 367 ("ganoiden").
Stannius, H. 1854 A (Ganoidei).
Steinmann, G. 1908 A, 295 ("ganoiden").
1927 A, 9.
Stephan, P. 1900 A, 294, 316 ("ganoides").
Stolley, E. 1920 A, 76 ("ganoiden").
Stromer, E. 1912 A, 28, 48.
1925 B, 348, 350.
Traquair, R. H. 1870 A, 177 ("ganoids").
Uhlmann, E. 1921 A ("ganoiden").
Veit, O. 1907 A, 174 ("ganoiden").
Wagner, R. 1843 A ("ganoiden").
Whitehouse, R. H. 1910 C, 135 ("ganoids").
Wiedersheim, R. 1892 A, 45 ("ganoiden").
Woodward, A. S. 1922 C, 96.
Wright, W. 1909 A, 671 ("ganoids").
Ziegler, H. E. 1901 A, 231 ("ganoiden").
Zittel and Koken 1911 A, 90.
Zittel and Schlosser 1923 A, 90.

Order CHONDROSTEI Müller.

Müller, J. 1845 A, 119, 137.
Hay, O. P. 1902 A, 365.
Allis, E. P. 1905 A, 478, 495.
1909 A, 202.
1915 A, 613.
1918 B, 263.
1919 A, 374.
Arldt, T. 1907 D, 645.
1923 A, 492 ("chondrostier").
Beer, G. R. 1926 A, 277.
Belling, D. E. 1912 A, 52.
Bonaparte, C. L. 1833 B, 1202 (Eleutheropomi).
Bridge, T. W. 1878 A, 727 (Selachoidei).
1904 A, 485.
Bronn, H. G. 1849 A, 830, seq.
Carus, V. 1875 A, 594.
Cope, E. D. 1871 T, 451.
1891 N, 20.
Cunningham, J. T. 1912 A, 240, 246, 261, 383.
Davidoff, M. 1879 A, 485.
Dean, Gudger, Henn 1923 A, 674.
Duméril, A. 1870 A, 18, 19 ("chondrostés").
Eastman, C. R. 1907 B, 23, 170.
1908 A, 63, 69, 255.
1911 A, 18, 20, 45.
1914 A, 140.
1917 A, 244.
Emery, C. 1895 A, 224 ("chondroganoides").
Fürbringer, M. 1902 A, 163 ("chondrosteiden").
Gadow, H. 1902 B, 359.
Gaupp, E. 1898 B, 841, 863 ("knorpelganoiden").
1905 D, 902 ("knorpelganoiden").
1913 A, 83 ("knorpelganoiden").
Gegenbaur, C. 1866 A, 123.
Gill, T. 1905 A, 658.
1909 B, 838 (Chondroganoidei).
Goetsch, W. 1920 A, 514.
Goodrich, E. S. 1904 A, 495.
1906 A, 351.
1909 A, 307 (Chondrostei); 315 (Acipenseroidei).
1912 A, 80.
Greene, J. R. 1861 A, 227.
Gregory, W. K. 1907 D, 448, 462 (Acipenseroidei); 462 (Chondrostei); 448, 462 (Heterocerci).
1920 A, 221.
Hasse, C. 1893 C, 76 ("knorpelganoiden").
Heckel, J. 1851 A, 219.
Hilzheimer, M. 1913 A, 471.
Hoernes, R. 1886 A, 546, 549.
Hubbs, C. L. 1919 A, 570.
Huxley, T. H. 1861 D, 441, 448.
Jaekel, O. 1906 D, 180.
1911 A, 49 (Chondrostei); 80 (Heterocerci).
1919 A, 75, 104.
1921 A, 222, 234 (Chondrostea).
1926 A, 174.
1927 B, 337.

Jordan, D. S. 1905 A, ii (Lysopteri); 17, 563 (Chondrostei).
1907 B, 253, 760.
1923 A, 111 (Chondrostei); 113 (Glaniostomi, Selachostomi).
Jordan and Gilbert 1882 A, 82.
Kehrer, F. A. 1896 A, 351 ("knorpelganoiden").
Kiaer, J. 1924 A, 108.
Kingsley, J. S. 1885 A, 92.
1925 A, 98.
Klaatch, H. 1893 B, 665 ("knorpelganoiden").
1893 C, 148 ("knorpelganoiden").
Lakjer, T. 1927 A, 280 ("chondrostier").
Leunis and Ludwig 1883 A, 776.
Lönnberg, E. 1901 A.
1902 A (Sturiones).
Luther, A. 1913 A.
1913 B, 5, 15, 47, 55.
Lütkin, C. 1868 C.
Meek, A. 1916 A, 48.
Miall, L. C. 1872 A, 34.
Moodie, R. L. 1915 I, 145.
Parker, W. K. 1881 C, 71 ("chondrostean ganoids").
Parker and Haswell 1897 A, 203.
Pompeckj, J. F. 1913 A, 1130 (Chondrostei); 1141 (Chondrosteoidei).
1926 A, 71.
Rabl, C. 1901 A, 481 ("chondrosteiden").
Rauther, M. 1913 A, 1099.
Regan, C. T. 1904 A, 330, 332.
1906 A, 729.
1909 B, 75.
1923 B, 458.
Reynolds, S. H. 1897 A, 67, 105, 117, 123, 537.
Romer, A. S. 1924 A, 121, 127, 128.
Rosén, N. 1916 A, 22-30.
Ryder, J. 1885 C, 96.
1886 A, 74, 77.
Schlesinger, G. 1909 A, (147).
Schmalhausen, J. J. 1912 A, 524.
1913 A, 2.
Schmalhausen, J. J. 1913 C.
1916 C, 209.
1917 A, 108.
Sewertzoff, A. N. 1896 A, 273 ("knorpelganoiden").
1918 A, 207.
1923 B.
1926 A, 451 (Chondrostei); 523 (Chondrosteoidei); 451, 523 (Palæoniscoidei).
1926 B, 547 (Chondrostei, Chondrosteoidei)
1926 C, 42 ("knorpelganoiden").
1926 D, 76, 83.
1926 E, 556.
1926 F, 274 ("knorpelganoiden").
Sewertzoff and Disler 1924 A, 345 ("knorpelganoiden").
Shann, E. W. 1919 A, 556.
Stensiö, E. A. 1921 A, 271.
1925 A, 119, 216.
1927 A, 32.
Stromer, E. 1912 A, 30 (Chondrostei); 31 (Heterocerci).
1925 B, 356 (Chondrostei, Heterocerci).
Suschkin, P. P. 1910 A, 250.
Terra, P. 1911 A, 204.
Traquair, R. H. 1880 A, 158.
1900 C, 508 (Acipenseroidei).
1911 A, 7 (Acipenseroidei).
Wallace, A. R. 1876 A, ii, 459.
Watson, D. M. S. 1925 A, 815, 849.
Whitehouse, R. H. 1910 B, 593, 594.
Woodward, A. S. 1906 A, 315.
1906 C, 276.
1922 C, 85.
Woodward, H. 1878 A, 18, 22.
Zittel and Koken 1911 A, 94 (Chondrostei); 97 (Heterocerci).
Zittel and Schlosser 1923 A, 94, 97 (Chondrostei, Heterocerci).
Zittel and Woodward 1902 A, 73.
Zograf, N. 1887 A, 70.
1896 B, 320.

Suborder Palæonisciformes, new name.

Cope, E. D. 1880 P, 440 (Lysopteri).
Goodrich, E. S. 1909 A, 309 (Palæoniscoidei).
Jordan, D. S. 1905 A, ii, 13, 580 (Lysopteri).
1907 B, 249 (Lysopteri).
Sewertzoff, A. N. 1923 B, 105-145 (Palæoniscoidei).
1926 A, 451, 523.
Zittel and Woodward 1902 A, 75 (Heterocerci).

PALÆONISCIDÆ Owen.

Owen, R. 1860 E, 136.
Hay, O. P. 1902 A, 365.
Abel, O. 1919 A, 186, fig. 170.
1920 A, 343 ("palæonisciden").
1921 A, 212 ("palæonisciden").
Allis, E. P. 1905 A, 490.
1919 A, 375.
1919 B, 75.
1922 A, 149.
1923 A, 57.
Arldt, T. 1907 D, 670.
1923 A, 493 ("palæonisciden").
Bridge, T. W. 1878 A, 371.
1904 A, 486.
Bronn, H. G. 1849 A, 830, seq. (Sauroidei).
Carus V. 1875 A, 591 (Palæoniscini).
Cope, E. D. 1891 N, 20.
Cunningham, J. T. 1897 A, 498.
Deecke, W. 1913 A, 72 ("palæonisciden").
Eastman, C. R. 1905 A, 57.
1907 B, 23, 171.
1908 A, 256.
1913 A, 119 ("palæoniscid").
1917 A, 273.
Fitzinger, L. J. 1873 A, 52 (Palæonisci).
Gill, E. L. 1923 B, 467.
Gill, T. 1881 A, 371.
Goodrich, E. S. 1904 A, 495, 499.
1908 A, 768.
1909 A, 309 (Palæoniscidæ, Palæoniscoidei).
1913 A, 80.
Gregory, W. K. 1907 D, 448.

Gregory, W. K. 1915 D, 322.
Hennig, E. 1915 A, 577 (Palæonisci).
Hubbs, C. L. 1919 B, 62, 63.
Jaekel, O. 1911 A, 80 ("palæonisciden").
1926 D. 70.
Jordan, D. S. 1905 A, ii, 14, 584.
1907 B, 250, 760.
1923 A, 111.
Kiaer, J. 1924 A, 95, 97, 99, 108, 109, 125, fig. 42 (Palæoniscoidei).
Lambe, L. M. 1909 B, 176.
1910 B, 9.
1912 A, 5.
Moodie, R. L. 1915 I, 145.
Pompeckj, J. F. 1913 A, 1140.
Regan, C. T. 1904 A, 334.
1923 B, 455, 460.
Rice and Gregory 1906 A, 172 ("palæoniscids").
Ridewood, W. G. 1904 A, 69 ("palæoniscid fishes").
Rosén, N. 1916 A, 18, 30, fig. 9 ("Palæoniscoidei).
Schlosser, M. 1917 A, 133, 135, 138, 147 ("palæonisciden").
Scupin, H. 1896 A, 156, 181.
Sewertzoff, A. N. 1923 B.
1926 E, 555.
Steinmann, G. 1907 A, 410.
Stensiö, E. A. 1921 A, 148, 238.
1922 A, 1263 ("palæoniscids").
1925 A, *passim*.
1925 B, 162, 187.
Stolley, E. 1920 A, 79 ("palæonisciden").
Stromer, E. 1905 H, 216.
1925 B, 360. ("palæonisciden").
Traquair, R. H. 1879 C, 128.
1880 A, 157.
1900 C, 507.
1901 A, 61.
1909 A.
1911 A, 7.
1911 B.
1912 A.
1914 A.
Trouessart, E. L. 1906 A, 212.
Watson, D. M. S. 1913 D, 26 ("palæoniscids").
1923 A, 472.
1925 A, 815-870, figs. 9-20.
Woodward, A. S. 1906 A, 313.
1906 C, 276.
1911 C, 46 ("palæoniscids").
1924 A, 113.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 98.
Zittel and Woodward 1902 A, 75.

GONATODUS Traquair. Type *Amblypterus punctatus* Agassiz.

Hay, O. P. 1902 A, 365.
Goodrich, E. S. 1908 A, 768.
Kiaer, J. 1924 A, 87.
Stensiö, E. A. 1925 A, 86.
Traquair, R. H. 1877 D, 265.
1907 A, 92, fig. 2.
Watson, D. M. S. 1925 A, 859, fig. 27.

Gonatodus brainerdi (Thomas).

Hay, O. P. 1902 A, 365.
Hussakof, L. 1908 A, 74.
Newberry, J. S. 1874 G, 90, 98 (Palæoniscus).
1874 H, 212 (Palæoniscus).
Traquair, R. H. 1907 A, 93.
Mississippian (Berea grit); Ohio.

AMBLYPTERUS Agassiz. Type *A. latus* Agassiz.

Hay, O. P. 1902 A, 365.
Abel, O. 1919 A, 188, fig. 143.
1920 A, 337, fig. 534.
Agassiz, L. 1833 A, 371.
1835 B, 345.
1835 H, 205.
1844 C, 268.
Atthey, T. 1868 C, 361.
Barkas, W. J. 1874 D, 549.
Brongniart, C. 1888 C, 57.
Bronn, H. G. 1837 A, 126.
1848 A, 28.
1849 A, 657.
Coulon, L. 1903 A, 139.
Deecke, W. 1913 A, 72.
Egerton, P. G. 1849 B, 1.
Giebel, C. G. 1855 A, 113, pl. xlvi, fig. 8.
Goodrich, E. S. 1904 A, 496.
1909 A, 212.
Heckel, J. J. 1850 A, 363.
Heilprin, A. 1887 A, 302.
Jordan and Evermann 1917 A, 144.
Kiaer, J. 1924 A, 106.
Klaatsch, H. 1890 A, 144.
Mantell, G. A. 1844 A, 633.
Newberry, J. S. 1857 D, 364.
Owen, R. 1845 B, 69.
1866 A, 196.
Scupin, H. 1896 A, 158.
Stensiö, E. A. 1925 A, 86, 209.
Watson, D. M. S. 1925 A, 825, 826, fig. 4.
Woodward and White 1926 A, 570.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 99.
Zittel and Woodward 1902 A, 75.

Amblypterus carolinæ Hay.

Hay, O. P. 1902 A, 365.
Triassic (Chatham): North Carolina.

HAPLOLEPIS E. A. Miller. Type *Eurylepsis corrugata* (Newb.).

Hay, O. P. 1902 A, 366.
Arldt, T. 1923 A, 494 (Eurylepis).
Barkas, W. J. 1874 D, 550 (Eurylepis).
Davis, J. W. 1880 C, 60 (Eurylepis).
Newberry, J. S. 1857 D, 364 (Mekolepis).
Traquair, R. H. 1914 B, 182 (Eurylepis).
Zittel and Koken 1911 A, 98 (Eurylepis).
Zittel and Schlosser 1923 A, 99, fig. 162 (Eurylepis).
Zittel and Woodward 1902 A, 75 (Eurylepis).

Haplolepis corrugata (Newb.).

Hay, O. P. 1902 A, 366.
Hussakof, L. 1908 A, 74.
Pennsylvanian; Ohio.

Haplolepis granulata (Newb.).

Hay, O. P. 1902 A, 366.
Hussakof and Bryant 1919 A, 191.
Pennsylvanian; Ohio.

Haplolepis minima (Newb.).

Hay, O. P. 1902 A, 366.
Pennsylvanian; Ohio.

Haplolepis ornatissima (Newb.).

Hay, O. P. 1902 A, 366.
Hussakof, L. 1908 A, 75.
Pennsylvanian; Ohio.

Haplolepis ovoidea (Newb.).

Hay, O. P. 1902 A, 366.
Pennsylvanian; Ohio.

Haplolepis serrata (Newb.).

Hay, O. P. 1902 A, 366.
Pennsylvanian; Ohio.

Haplolepis striolata (Newb.).

Hay, O. P. 1902 A, 366.
Pennsylvanian; Ohio.

Haplolepis tuberculata (Newb.).

Hay, O. P. 1902 A, 366.
Hussakof and Bryant 1919 A, 191.
Zittel and Woodward 1902 A, 76, fig. 135 (Eurylepis).
Pennsylvanian; Ohio.

Haplolepis sp. indet.

Eastman, C. R. 1902 B, 97 (Eurylepis).
1902 G, 541 (Eurylepis). Pennsylvanian (Mazon Creek); Illinois.
1903 B, 194 (Eurylepis). Pennsylvanian (Mazon Creek); Illinois.
1908 A, 260 (Eurylepis). Mississippian (Waverly): Kentucky.

CHEIROLEPIS Agassiz. Type *C. traillii* Agassiz.

Hay, O. P. 1902 A, 366.
Abel, O. 1907 D, (162).
1919 A, 187, fig. 141.
Agassiz, A. 1877 A, 124.
Agassiz, L. 1835 B, 345.
1844 C, 269.
Arldt, T. 1923 A, 493.
Barkas, W. J. 1874 D, 549.
Bridge, T. W. 1904 A, 487.
Bronn, H. G. 1848 A, 285.
1849 A, 656.
Coulon, L. 1903 A, 137.
Eastman, C. R. 1907 B, 171.
1908 A, 255.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1904 A, 497.
1908 A, 768, fig. 202.
1909 A, 311, fig. 288.
Gregory, W. K. 1915 D, 322.
Heilprin, A. 1887 A, 149 (Chirolepis).
Huxley, T. H. 1861 D, 458.
Lütken, C. 1871 A, 287.
Osborn, H. F. 1916 E, 605, fig. 14.
1917 B, 170, fig.
Pompeckj, J. F. 1913 A, 1140, fig. 46.
Regan, C. T. 1904 A, 339.
Schlosser, M. 1917 A, 147.
Sewertzoff, A. N. 1923 B, 119.
Traquair, R. H. 1880 A, 150, 155.
1900 C, 507.
Watson, D. M. S. 1923 A, 472.
1925 A, 816, 820, 823, 864, figs. 1-3.
Watson and Day 1916 A, 28.
Woodward, A. S. 1906 C, 276.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 98.
Zittel and Woodward 1902 A, 75.

Cheirolepis canadensis Whiteaves.

Hay, O. P. 1902 A, 366.
Clarke, J. M. 1913 A, 115.
Claypole, E. W. 1883 C, 278.
Eastman, C. R. 1907 B, 17, 171.
1908 A, 256.
1917 A, 273.
Hussakof and Bryant 1919 A, 181, pl. lvii, figs. 1, 2.
Lambe, L. M. 1904 C, 17, 34, 43.
1912 A, 5.
Whiteaves, J. F. 1907 B, 255.
Upper Devonian (Scaumenac); Quebec.

RHADINICHTHYS Traquair. Type *Palæoniscus ornatissimus* Agassiz.

Hay, O. P. 1902 A, 367.
Arldt, T. 1923 A, 494.
Brongniart, C. 1888 C, 61.
Day, H. 1915 A, 422, figs. 1-3.
Eastman, C. R. 1908 A, 257.
1916 A, 655.
1917 A, 273.
Jaekel, O. 1927 B. 338.
Moodie, R. L. 1915 I, 137, 142, 147.
Stensiö, E. A. 1921 A, 148.
1925 A, 86, 209.
Tornquist, A. 1904 A, 347.
Traquair, R. H. 1877 D, 431.
Traquair, R. H. 1890 G, 493.
1911 B, 126.
Watson, D. M. S. 1925 A, 832.
Woodward, A. S. 1924 A, 113, fig. 5.
Woodward and White 1926 A, 570.

Rhadinichthys alberti (Jackson).

Jackson, C. T. 1851 B. 22, pl. i, fig. 1; pl. ii, figs. 2-6, 8 (Palæoniscus).
Hay, O. P. 1902 A, 367 (R. alberti, R. cairnsii).
Brongniart, C. 1888 C, 49 (Palæoniscus alberti, P. cairnsii).

Dawson, J. W. 1868 A, 131, fig. 62 (Palæoniscus).
Eastman, C. R. 1908 A, 261 (R. alberti, R. cairnsii).
Hussakof and Bryant 1919 A, 188, text-fig. 63.
Jackson, C. T. 1851 C, 281 ("Palæoniscus").
Kiaer, J. 1924 A, 99, fig. 44.
Lambe, L. M. 1904 C, 18, 34, 43 (R. alberti, R. cairnsii).
1909 A, 167, figs. 1, 2 (R. cairnsii a syn.).
1910 B, 18, pl. iii, figs. 1-6 (R. cairnsii a syn.).
Tornquist, A. 1904 A, 350 (R. cairnsi).
Traquair, R. H. 1877 A, 559 (R. alberti, R. cairnsii).
Woodward and White 1926 A, 570, 571.
Young, G. A. 1913 A, 356.
Mississippian (Albert); New Brunswick.

Rhadinichthys antiquus (Williams).

Hay, O. P. 1902 A, 368 (Palæoniscum).
Eastman, C. R. 1907 B, 18, 171 (Palæoniscus. This genus?).
1908 A, 282.
1917 A, 273 (To Rhadinichthys).
Hussakof and Bryant 1919 A, 19, 182, 183, pl. lxiii, fig. 3, pl. lxiv; text-figs. 60, 62.
Upper Devonion (Portage); New York.

Rhadinichthys deani Eastman.

Eastman, C. R. 1908 A, 264, pl. xiii, text-figs. 40, 41.
Eastman, C. R. 1913 A, 119.
1916 B, 104.
1917 A, 273.
Dean, B. 1912 A, 228.
Moodie, R. L. 1910 A, 367.
1911 G, 278.
1915 I, 139, 142, 147, fig. 4.
1920 F, 330, figs. 1, 2.
Parker, G. H. 1908 A, 272 ("fish").
Wiman, C. 1918 B, 88.
Mississippian (Waverly); Kentucky.

Rhadinichthys devonicus (Clarke).

Hay, O. P. 1902 A, 368 (Palæoniscum).
Clarke and Ruedemann 1903 A, 768 (Palæoniscus).
Clarke and Luther 1904 A, 62 (Palæoniscus).
Eastman, C. R. 1907 B, 17, 171 (Palæoniscus?).
1908 A, 258, 282.
Hussakof and Bryant 1919 A, 19, 182, pls. lix-lxiii; pl. lxv, figs. 1, 3; text-figs. 60, 61.
Merrill, G. P. 1907 A, 13 (Palæoniscus).
Traquair, R. H. 1911 B, 127.
Upper Devonian (Genesee and Portage), New York: (New Albany); Kentucky.

Rhadinichthys elegantulus (Eastman).

Eastman, C. E. 1908 A, 274 (Elonichthys).
Hussakof and Bryant 1919 A, 189, pl. lxvi, text-fig. 63.
Lambe, L. M. 1909 A, 167 (Elonichthys).
1910 B, 30 (Elonichthys).
Young, G. A. 1913 A, 356 (Elonichthys).
Mississippian (Albert); New Brunswick.

Rhadinichthys gracilis (Newb. and Worth.).

Hay, O. P. 1902 A, 367.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
1917 A, 274, pl. ix, fig. 4.
Pennsylvanian (Mazon Creek); Illinois.

Rhadinichthys leidyianus (Lea).

Hay, O. P. 1902 A, 367.
Merrill, G. P. 1907 A, 14 (Palæoniscus).
Pennsylvanian; Pennsylvania.

Rhadinichthys? lineatus (Newb.).

Hay, O. P. 1902 A, 367.
Hussakof, L. 1908 A, 95 (This genus?).
Pennsylvanian; Ohio.

Rhadinichthys reticulatus (Williams).

Hay, O. P. 1902 A, 368 (Palæoniscum).
Eastman, C. R. 1907 B, 18, 171 (To Rhadinichthys).
1908 A, 282.
1917 A, 273.
Hussakof and Bryant 1919 A, 182.
Upper Devonian (Portage); New York.

Rhadinichthys sp. indet.

Branson, E. B. 1911 B, 30, pl. i, figs. 1-6. Devonian (Ohio shales); Ohio.
Eastman, C. R. 1907 B, 172, pl. iv, fig. 11; pl. ix, fig. 4. Devonian (Chemung); Pennsylvania.
1908 A, 260. Devonian (Chemung); Pennsylvania.
Hussakof and Bryant 1919 A, 188. Upper Devonian (Portage); New York.
Kindle, E. M. 1914 C, 288. Devonian (Huron): Ontario.

CANOBIUS Traquair. Type *C. ramsayi* Traquair.

Traquair, R. H. 1881 A, 46.
Brongniart, C. 1888 C, 62.
Lambe, L. M. 1909 A, 167, 172.
Scupin, H. 1896 A, 158.
Traquair, R. H. 1890 G, 493.
1912 A, 171.
1914 A, 181.
Woodward, A. S. 1891 A, 430.

Canobius modulus (Dawson).

Hay, O. P. 1902 A, 367 (Rhadinichthys).
Eastman, C. R. 1908 A, 262, fig. 39 (Rhadinichthys).
Lambe, L. M. 1904 C, 18, 35, 43 (Rhadinichthys).
1909 A, 167, 172, figs. 7, 8.
1910 B, 31, pl. xi, figs. 1-7.
Traquair, R. H. 1912 A, 171.
Mississippian (Albert); New Brunswick. Nova Scotia.

PYGOPTERUS Agassiz. Type *P. humboldti* Agassiz.

Hay, O. P. 1902 A, 367.
Agassiz, L. 1833 A, 475.
1835 H, 217.
1844 C, 267.
Atthey, T. 1868 C, 362.
Barkas, W. J. 1874 D, 552.
Bronn, H. G. 1848 B, 1066.
1849 A, 662.
Deecke, W. 1926 A, 186.
Stensiö, E. A. 1921 A, 149, 203.
1925 A, 86, 209.
Wilser, J. L. 1923 A, 68, fig.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 98.

Pygopterus humboldti Agassiz.

Hay, O. P. 1902 A, 367.
Permian; Europe: Triassic (Newark): Pennsylvania.

PALÆONISCUM Blainv. Type *P. freieslebenense* Blainv.

Unless otherwise indicated the authors, as cited, use the form *Palæoniscus*.
Hay, O. P. 1902 A, 367 (Palæoniscum).
Abel, O. 1912 F, 476.
1919 A, 187, fig. 142.
Agassiz, L. 1833 A, 372.
1835 B, 345.
1835 D, 189.
1835 H, 206.
1844 C, 268.
Atthey, T. 1868 C, 357, pl. xvi.
Barkas, W. J. 1874 D, 55 (Palæoniscum).
Bridge, T. W. 1904 A, 486.
Brongiart, C. 1888 C, 57.
Bronn, H. G. 1848 B, 893 (Palæoniscum, Palæoniscus).
1849 A, 657.
Coulon, L. 1903 A, 137.
Cunningham, J. T. 1897 A, 497.
Cuvier, G. 1825 A, v, 2, 307 (Palæoniscum).
Deecke, W. 1913 A, 72.
1926 A, 186.
Dollo, L. 1904 C, 139, 235.
Dormitzer, M. 1852 A, 61.
Eastman, C. R. 1907 B, 171.
1915 B, 440.
1916 A, 655.
1916 B, 104.
1917 A, 273.
Egerton, P. G. 1852 C, 6 C, 1, pl. ii.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1904 A, 496.
1908 A, 757.
1909 A, 310, fig. 286.
Gregory, W. K. 1901 A, 143 (Palæoniscum).
Heckel, J. J. 1850 A, 363, 365.
Heilprin, A. 1887 A, 302.
Hennig, E. 1915 A, 577.
1915 C, 52.
Jackson, C. T. 1854 A, 239.
Jaekel, O. 1911 A, 86, figs. 61, 63.
Jordan, D. S. 1905 A, ii, 14, 584 (Palæoniscum).
1907 B, 250 (Palæoniscum).
1917 A, 108 (Palæoniscum).
Klaatsch, H. 1890 A, 144.
Lönnberg, E. 1901 A.
Lütken, C. 1868 C.
1871 A, 287.
Mantell, G. A. 1844 A, 633.
Miall, L. C. 1872 A, 25.
Müller, J. 1845 A.
1846 C, 118.
Murchison, R. I. 1854 A, 317, fig. 58.
Newberry, J. S. 1857 D, 364.
Pompeckj, J. F. 1913 A, 1141, fig. 47.
Price, P. H. 1927 A, 215, 225, pls. xv, xix.
Redfield, W. C. 1842 A, 23.
Regan, C. T. 1923 B, 461.
Reynolds, S. H. 1897 A, 67.
Rogers, H. D. 1844 A, 249, 251.
Ryder, J. 1885 E, 95.
Scupin, H. 1896 A, 156, pl. ix, figs. 2, 3.
Sewertzoff, A. N. 1926 E, 555.
Steinmann, G. 1907 A, 410.
Stensiö, E. A. 1921 A, 149.
1925 A, 210.
Tornquist, A. 1904 A, 348.
Traquair, R. H. 1901 A, 61.
Watson, D. M. S. 1925 A, 822, 826.
Woodward, A. S. 1898 B, 83, fig. 61.
1906 C, 276, fig. 9.
1922 C, 85, fig. 91.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 98, fig. 159.
Zittel and Woodward 1902 A, 76.

Palæoniscum scutigerum Newb.

Hay, O. P. 1902 A, 368.
Pennsylvanian; Ohio.

Palæoniscum sp. indet.

Bell, W. A. 1913 A, 340, 343 (Palæoniscus). Pennsylvanian (Joggins); Nova Scotia.
Hobbs, W. H. 1901 A, 55 ("Palæoniscus"). Triassic (Newark); Connecticut.
Phillips, W. B. 1912 A, 18 (Palæoniscus. This genus?). Permian (Wichita); Texas
Stauffer and Schroyer 1920 A, 146, pl. xiii, figs. 38, 39 (Palæoniscus). Permian (Elm Grove); Ohio.
Tilton, J. L. 1926 B, 394 (This genus?). Permian; West Virginia.

TEGEOLEPIS S. A. Miller. Type *Actinophorus clarkii* Newb.

Hay, O. P. 1902 A, 368.
Jordan, D. S. 1920 C, 458.

Tegeolepis clarkii (Newb.).

Hay, O. P. 1902 A, 368.
Claypole, E. W. 1903 A, 319 (Actinophorus).
Eastman, C. R. 1907 B, 19 (Actinophorus).
1908 A, 285 (Actinophorus).
Hussakof, L. 1908 A, 102.
Devonian (Cleveland); Ohio.

ELONICHTHYS Giebel. Type *E. germari* Giebel.

Hay, O. P. 1902 A, 368.
Arldt, T. 1923 A, 494.
Barkas, W. J. 1874 D, 550.
Brongniart, C. 1888 C, 60.
Deecke, W. 1913 A, 72.
Eastman, C. R. 1903 B, 190.
1917 A, 274.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1908 A, 768.
Raymond, P. E. 1925 B, 553.
Stensiö, E. A. 1921 A, 149.
Traquair, R. H. 1877 D, 275.
1879 B, 119.
1901 A.
1907 A.
Watson, D. M. S. 1925 A, 832, 851, figs. 21-25, 28, 29.
Woodward, A. S. 1922 C, 85, fig. 90.
Zittel and Koken 1911 A, 98.
Zittel and Schlosser 1923 A, 98.
Zittel and Woodward 1902 A, 77.

Elonichthys brownii (Jackson).

Hay, O. P. 1902 A, 368 (E. browni).
Eastman, C. R. 1908 A, 266.
Hussakof and Bryant 1919 A, 191.
Lambe, L. M. 1904 C, 18, 35, 43.
1909 A, 167, 169, figs. 3, 4 (Palæoniscus jacksoni Dawson a syn.).
1910 B, 22, pls. iv-ix (E. browni).
Young, G. A. 1913 A, 356.
Mississippian (Albert); New Brunswick.

Elonichthys cupidineus Lambe.

Lambe, L. M. 1916 B, 39, pl. ii.
Raymond, P. E. 1925 B, 553.
Triassic? (Upper Banff); Alberta.

Elonichthys disjunctus Eastman.

Eastman, C. R. 1903 B, 191, 194, pl. iii, fig. 31.
Pennsylvanian (Mazon Creek); Illinois.

Elonichthys elegans (Emmons).

Hay, O. P. 1902 A, 368.
Lyman, B. S. 1894 A, 212 (Radiolepis).
Wherry, E. T. 1912 A, 377 (Radiolepis. This species?).

Elonichthys ellsi Lambe.

Lambe, L. M. 1909 A, 171, figs. 5, 6.
Lambe, L. M. 1910 B, 29, pl. x, figs. 1-6.
Young, G. A. 1913 A, 356.
Mississippian (Albert); New Brunswick.

Elonichthys hypsilepis Hay.

Hay, O. P. 1902 A, 368.
Andreae, A. 1903 B, 442.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 188, 194.
1917 A, 274, pl. ix, fig. 3; pl. x, fig. 3.
Merrill, G. P. 1907 A, 11.
Pennsylvanian (Mazon Creek); Illinois.

Elonichthys peltigerus Newb.

Hay, O. P. 1902 A, 368 (E. peltigerus, E. macropterus).
Andreae, A. 1903 B, 442.
Eastman, C. R. 1902 B, 97 (Amblypterus macropterus a syn.).
1902 G, 541.
1903 B, 194.
1917 A, 274.
Newberry, J. S. 1878 D, 810 (Palæoniscus).
Price, P. H. 1927 A, 226, text-fig. 5 (Palæoniscus).
Pennsylvanian; Illinois, Ohio.

Elonichthys perpennatus Eastman.

Eastman, C. R. 1902 G, 539, 541, fig. 4.
1902 B, 97.
1903 B, 190, 194, pl. v, fig. 49.
1917 A, 275, pl. ix, fig. 1.
Pennsylvanian (Mazon Creek); Illinois.

Elonichthys sp. indet.

Woodward, A. S. 1900 E, 203. Carboniferous (Horton); Nova Scotia.

SPHÆROLEPIS Fritsch. Type *S. kounoviensis* Fritsch.

Fritsch, A. 1877, Sitzungsb. böhm. Ges. Wiss., 46.
Jordan, D. S. 1919 B, 389 (Sphœrolepis).
Hussakof, L. 1911 A, 170.
Woodward, A. S. 1891 A, 523.

Sphærolepis arctata (Cope).

Hay, O. P. 1902 A, 364 (Peplorhina).
Case, E. C. 1915 A, 96.
Cope and Matthew 1915 A, pl. iii, fig. 5 (Peplorhina; Sphærolepis).
Hay, O. P. 1900 A, 707 (Peplorhina).
Hussakof, L. 1911 A, 171, pl. xxxi, figs. 1, 2; text-fig. 54.
Pennsylvanian (Upper); Illinois: Permian (Wichita?, Clear Fork?); Texas.

ACROLEPIS Agassiz. Type *A. sedgwicki* Agassiz.

Hay, O. P. 1902 A, 369.
Agassiz, L. 1833 A, 476.
1835 H, 218.
1844 C, 267.
Barkas, W. J. 1874 D, 548.
Bronn, H. G. 1848 A, 9.
1849 A, 662.
Raymond, P. E. 1925 B, 553.
Stensiö, E. A. 1921 A, 149.
1925 A, 86, 209.
Traquair, R. H. 1890 G, 492.
1909 A.
Woodward, A. S. 1924 A.
Zittel and Koken 1911 A, 98.

Zittel and Schlosser 1923 A, 99.
Zittel and Woodward 1902 A, 77.

Acrolepis? hortonensis Dawson.

Hay, O. P. 1902 A, 369.
Lambe, L. M. 1904 C, 18, 35, 43.
Mississipian; New Brunswick.

Acrolepis hussakofi, new species.

Hussakof, L. 1916 A, 348, figs. 1, 2 ("palæoniscid fish").

O'Harra, C. C. 1916 A, 347 ("fishes").
Permian (Minnekahta); South Dakota.

Acrolepis lætus Lambe.

Lambe, L. M. 1916 B, 42, pl. iii.
Raymond, P. E. 1925 B, 553.
Stensiö, E. A. 1921 A, 149.
Triassic? (Upper Banff); Alberta.

PYRITOCEPHALUS Fritsch. Type *Palæoniscus sculptus* Fritsch.

Fritsch, A. 1895 A, 86.
Hussakof, L. 1911 A, 173.

Pyritocephalus sp. indet.

Case, E. C. 1915 A, 96.
Hussakof, L. 1911 A, 173, text-fig. 55.
Permian (Wichita?, Clear Fork?); Texas.

PLATYSOMATIDÆ.

Unless otherwise indicated the authors, as cited, use the name Platysomidæ.
Hay, O. P. 1902 A, 369.
Abel, O. 1912 F, 488 ("platysomiden").
1919 A, 190, figs. 147, 148.
1922 F, 77.
Allis, E. P. 1905 A, 490.
1919 A, 377.
Arldt, T. 1907 D, 674.
Bridge, T. W. 1878 A, 722.
1904 A, 487.
Bronn, H. G. 1849 A, 830, seq. ("lepidoiden").
Carus, V. 1875 A, 592.
Cope, E. D. 1891 N, 20.
Cunningham, J. T. 1897 A, 498.
Dean, Gudger, Henn 1923 A, 622.
Eastman, C. R. 1898 E, 183 ("platysomiden").
1907 B, 23 (Platysomatidæ).
1908 A, 255.
1917 A, 276 (Platysomatidæ).
Fitzinger, L. J. 1873 A, 52 (Platysomi).
Gill, T. 1881 A, 371.
Goodrich, E. S. 1908 A, 768.
1909 A, 312.
Gregory, W. K. 1907 D, 448.
Hoernes, R. 1886 A, 554.
Jordan, D. S. 1905 A, ii, 14, 586.
1907 B, 250, 760.
1923 A, 112.
Kiaer, J. 1924 A, 97.
Lütken, C. 1871 A, 289 ("platysomiens").
Pompeckj, J. F. 1913 A, 1141.
Schlosser, M. 1917 A, 134, 147 ("platysomiden").
Scupin, H. 1896 A, 159, 182.
Sewertzoff, A. N. 1923 B.
1926 A, 451 (Platysomatidæ).
Steinmann, G. 1907 A, 410.
1927 A, 48 ("platysomiden").
Stensiö, E. A. 1921 A, 250, 271.
1925 A, 119, 209.
Woodward, A. S. 1888 M, 142.
1898 A, 87.
1906 C, 276.
1911 C, 46 ("platysomids").
1921 C, 181.
1924 A, 114.
Zittel and Koken 1911 A, 100.
Zittel and Schlosser 1923 A, 100.
Zittel and Woodward 1902 A, 78.

CHIRODUS M'Coy. Type *C. pes-ranæ* M'Coy.

Hay, O. P. 1902 A, 369.
Abel, O. 1908 E, 415 (Cheirodus).
1912 F, 448, fig. 339 (Cheirodus).
Barkas, W. J. 1874 D, 545 (Cheirodus).
Böklen, H. 1887 A, 78 (Cheirodus).
Bridge, T. W. 1904 A, 488, fig. 286 (Cheirodus).
Eastman, C. R. 1917 A, 276 (Cheirodus).
Etheridge, R. 1906 A, 130 (Cheirodus).
Jordan, D. S. 1919 B, 239 (Cheirodus).
1923 A, 112 (Cheirodus).
Stensiö, E. A. 1925 A, 211, 212 (Cheirodus).
Woodward, A. S. 1924 A, 114, fig. 6 (Cheirodus).
Zittel and Koken 1911 A, 101, fig. 175.
Zittel and Schlosser 1923 A, 100, fig. 165 (Cheirodus).

Chirodus acutus Newberry.

Hay, O. P. 1902 A, 369.
Pennsylvanian; Ohio.

Chirodus orbicularis (Newb. and Worth.).

Hay, O. P. 1902 A, 369 (Platysomus).
Eastman, C. R. 1902 B, 97 (Platysomus).
1902 G, 541 (Platysomus).
1903 B, 193, 194 (Cheirodus).
1917 A, 276, pl. ix, fig. 2 (Cheirodus).
Pennsylvanian (Mazon Creek); Illinois.

PLATYSOMUS Agassiz. Type *P. gibbosus* (Agassiz).

Hay, O. P. 1902 A, 369.
Agassiz, A. 1877 A, 124.
Agassiz, L. 1835 B, 345.
Agassiz, L. 1835 H, 208.
1844 C, 267.
Allis, E. P. 1919 A, 377.

Barkas, W. J. 1874 D, 552.
Bridge, T. W. 1904 A, 488.
Bronn, H. G. 1848 B, 994.
1849 A, 658.
Deecke, W. 1913 A, 80.
Eastman, C. R. 1917 A, 276.
Hussakof, L. 1911 A, 173.
Jordan, D. S. 1919 B, 181 (Type Stromateus gibbosus Blv.).
Lambe, L. M. 1914 E, 17.
Murchison, R. I. 1854 A, 312, fig. 57.
Raymond, P. E. 1925 B, 553.
Scupin, H. 1896 A, 159, pl. ix, fig. 5.
Sewertzoff, A. N. 1926 E, 565.
Steinmann, G. 1927 A, 58, 68, text-fig. 16.
Stensiö, E. A. 1921 A, 251.
Traquair, R. H. 1900 C, 507.
Wagner, J. A. 1860 A, 81.
Woodward, A. S. 1898 B, 87, fig. 64.
1906 C, 277, fig. 10.
1924 A, 114.
Woodward, H. 1904 B, 141.
Zittel and Koken 1911 A, 101.
Zittel and Schlosser 1923 A, 101, fig. 165.
Zittel and Woodward 1902 A, 79.

Platysomus albertensis Lambe.

Lambe, L. M. 1916 A, 195 (No description).
Permian; Alberta.

Platysomus canadensis Lambe.

Lambe, L. M. 1914 E, 17, pl. i; text-fig.
1915 B, 121.
1916 B, 36.
Raymond, P. E. 1925 B, 553.
Stensiö, E. A. 1921 A, 251, 264.
Triassic? (Upper Banff); Alberta.

Platysomus circularis Newb. and Worth.

Hay, O. P. 1902 A, 369.
Eastman, C. R. 1902 G, 541.
1902 D, 97.
1903 B, 190, 194.
1917 A, 276.
Hussakof, L. 1908 A, 87.
Pennsylvanian (Mazon Creek); Illinois.

Platysomus lacovianus Cope.

Hay, O. P. 1902 A, 369.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
1903 B, 194.
1917 A, 276.
Hussakof, L. 1908 A, 87.
Merrill, G. P. 1907 A, 16.
Pennsylvanian (Mazon Creek); Illinois.

Platysomus palmaris Cope.

Hay, O. P. 1902 A, 369.
Beede, J. W. 1907 A, 120.
Case, E. C. 1915 A, 96.
Eastman, C. R. 1917 A, 276.
Hussakof, L. 1908 A, 88.
1911 A, 173, pl. xxx, fig. 7; text-fig. 56.
Pennsylvanian (Upper); Oklahoma, Illinois?; Permian (Wichita, Clear Fork); Texas (Enid); Oklahoma.

Platysomus sp. indet.

Phillips, W. B. 1912 A, 18, fig. 4 (This genus?).
Permian (Wichita); Texas.
Wegeman, C. H. 1915 A, 25. Permian (Wichita); Oklahoma.

TURSEODUS Leidy. Type *T. acutus* Leidy.

Hay, O. P. 1902 A, 369.
Stensiö, E. A. 1921 A, 149.

Turseodus acutus Leidy.

Hay, O. P. 1902 A, 369.
Hawkins, A. C. 1914 A, 153.
Lyman, B. S. 1894 A, 212.
Triassic (Newark); Pennsylvania.

DICTYOPYGIDÆ Hay.

Unless otherwise indicated the authors, as quoted, use the family name Catopteridæ.
Hay, O. P. 1902 A, 370 (Dictyopygidæ).
Bridge, T. W. 1904 A, 488.
Dean, Gudger, Henn 1923 A, 623.
Deecke, W. 1926 A, 195 ("catopteriden").
Eastman, C. R. 1905 B, 95.
1911 A, 18, 28, 46.
1914 A, 139.
1917 A, 279.
Goodrich, E. S. 1909 A, 313.
Gregory, W. K. 1907 D, 448.
Jordan, D. S. 1905 A, ii, 14, 16 (Dictyopygidæ).
1907 B, 252, 760 (Dictyopygidæ).
Jordan, D. S. 1923 A, 112.
Pompeckj, J. F. 1913 A, 1140.
Regan, C. T. 1904 A, 332.
Schlosser, M. 1917 A, 135 ("catopteriden").
Sewertzoff, A. N. 1923 B.
1926 A, 451.
Stensiö, E. A. 1921 A, 253, 271.
1925 A, 119, 210, 224.
Swinnerton, H. H. 1925 A, 87.
Traquair, R. H. 1900 C, 507.
Watson, D. M. S. 1925 A, 866 ("catopterids").
Zittel and Koken 1911 A, 102.
Zittel and Schlosser 1923 A, 101.
Zittel and Woodward 1902 A, 79.

REDFIELDUS Hay. Type *Catoperus gracilis* Redfield.

Unless otherwise indicated the authors, as quoted, employ the name *Catopterus*.
Hay, O. P. 1902 A, 370 (Redfieldius).
Abel, O. 1919 A, 189.
Arldt, T. 1923 A, 493.
Bronn, H. G. 1849 A, 658.
Deecke, W. 1913 A, 74.
1926 A, 194.

Eastman, C. R. 1905 B, 68, 95.
1911 A, 47, fig. 7.
1914 A, 144.
1917 A, 279.
Eaton, G. F. 1903 A, 267.
Emerson, B. K. 1898 A, 400.
Heilprin, A. 1887 A, 302.
Jordan, D. S. 1905 A, ii, 16 (Redfieldius).
1907 B, 252 (Redfieldius).
1920 C, 486 (Redfieldius).
Rice and Gregory 1906 A, 172.
Rogers, H. D. 1844 A, 251.
Stensiö, E. A. 1921 A, 253, 267.
Swinnerton, H. H. 1925 A, 96.
Traquair, R. H. 1900 C, 507.
Woodward, A. S. 1898 B, 87.
Zittel and Koken 1911 A, 102.
Zittel and Schlosser 1923 A, 102.
Zittel and Woodward 1902 A, 79.

Redfieldius anguilliformis (W. C. Redfield).

Hay, O. P. 1902 A, 370.
Lyman, B. S. 1894 A, 209 (Catopterus).
Triassic (Newark); Connecticut, New Jersey

Redfieldius gracilis (J. H. Redfield).

Hay, O. P. 1902 A, 370.
Bayley, Kümmel, and Salisbury 1914 A, 13 (Catopterus).
Cross, W. 1899 A, 3 (Catopterus. This species?).
1899 B, 3 (Catopterus. This species?).
Eastman, C. R. 1905 B, 96, pl. xiii (Catopterus).
1911 A, 28, 48, pls. ix-xi (Catopterus).
1914 A, 142, pls. xxx, xxxi (Catopterus).
1917 A. 280, pl. xii, figs. 1, 2; pl. xiii, figs. 1, 2 (Catopterus).
Hawkins, A. C. 1914 A, 153 (Catopteris).
Hobbs, W. H. 1901 A, 55 (Catopterus).
Huene, F. 1922 H, 150 (Catopterus).
1926 E, 2 (Catopterus. This species?).
Hussakof, L. 1908 A, 63 (Catopterus).
Hussakof and Bryant 1919 A, 192 (Catopterus).
Lull, R. S. 1917 D, 109 (Catopterus).
Lyman, B. S. 1894 A, 207 208, 209, 212, 214 (Catopterus).
Moodie, R. L. 1918 B, 390 (Catopterus).
1923 B, 329 (Catopterus).
Smith, J. H. 1900 A, 498 (Catopterus).
Triassic (Newark); Connecticut, New Jersey: (Dolores); Colorado?

Redfieldius minor (Newb.).

Hay, O. P. 1902 A, 370.
Lyman, B. S. 1894 A, 209 (Catopterus).
Triassic (Newark); Connecticut.

Redfieldius ornatus (Newb.).

Hay, O. P. 1902 A, 370.
Lyman, B. S. 1894 A, 209 (Catopterus).
Triassic (Newark); Connecticut.

Redfieldius parvulus (W. C. Redfield).

Hay, O. P. 1902 A, 370.
Lyman, B. S. 1894 A, 214 (Catopterus).
Triassic (Newark); Connecticut.

Redfieldius redfieldi (Egerton).

Hay, O. P. 1902 A, 370.
Bayley, Kümmel and Salisbury 1914 A, 13 (Catopterus).
Eastman, C. R. 1905 B, 98 (Catopterus).
1911 A, 28, 51, figs. 5, 6 (Catopterus).
1914 A, 142 (Catopterus).
Hussakof, L. 1908 A, 64 (Catopterus).
Hussakof and Bryant 1919 A, 192 (Catopterus).
Lull, R. S. 1917 D, 109 (Catopterus).
Lyman, B. S. 1894 A, 209 (Catopterus).
Philippi and Frech 1903 A, 12, pl. vii (Catopterus).
Rice and Gregory 1906 A, pl. xvii (Catopterus).
Triassic (Newark); Connecticut, New Jersey.

Redfieldius sp. indet.

Newberry, J. S. 1888 A, 61 (Catopterus). Triassic (Newark); New Jersey.
Hussakof, L. 1908 A, 65 (Catopterus). Triassic (Newark); New Jersey.

DICTYOPYGE Egerton. Type *D. macrura* (Redfield).

Hay, O. P. 1902 A, 370.
Arldt, T. 1923 A, 493.
Barkas, W. J. 1874 D, 550.
Deecke, W. 1913 A, 74.
1926 A, 186.
Eastman, C. R. 1905 B, 99.
1911 A, 55.
1917 A, 278.
Hussakof and Bryant 1919 A, 192.
Stensiö, E. A. 1921 A, 267.
Swinnerton, H. H. 1925 A, 94.
Traquair, R. H. 1900 C, 507.
Zittel and Koken 1911 A, 102.
Zittel and Schlosser 1923 A, 103.

Dictyopyge macrura (W. C. Redfield).

Hay, O. P. 1902 A, 370.
Eastman, C. R. 1905 B, 99.
1911 A, 28, 55.
Goodrich, E. S. 1909 A, 314, fig. 292.
Hussakof and Bryant 1919 A, 192, pls. xxiv, lxvii.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 208.
Redfield, J. H. 1888 A, 64 (Catopterus).
Rogers, W. B. 1843 A, 315 (Catopterus).
1884 A, 315 (Catopterus).
Shaler and Woodworth 1899 A, 431.
Triassic (Newark); Virginia.

Suborder ACIPENSERIFORMES, new name.

Goodrich, E. S. 1909 A, 315 (Acipenseroidei).

DIPHYODONTIDÆ Jordan.

Jordan, D. S. 1923 A, 113.

DIPHYODUS Lambe. Type *D. longirostris* Lambe.

Lambe, L. M. 1902 A, 30.
Cockerell, T. D. A. 1919 A, 172.
Hay, O. P. 1910 B, 296.
The systematic position of this genus is extremely doubtful.

Diphyodus longirostris Lambe.

Lambe, L. M. 1902 A, 30, pl. xv, figs. 18, 19.
Bowen, C. F. 1915 A, 118, 148-150.
Brown, B. 1914 E, 378.
Cockerell, T. D. A. 1908 C, 162.
1919 A, 172.
Hatcher, J. B. 1905 B, 69.
Lambe, L. M. 1904 C, 22, 36, 45 (Diphiodus).
1907 B, 179.
Matthew, W. D. 1916 A, 485.
Osborn, H. F. 1902 I, 11, 16.
Peale, A. C. 1912 A, 754.
Stensiö, E. A. 1925 A, 9.
Upper Cretaceous (Belly River); Alberta: (Judith River); Montana: (Lance); Wyoming.

Diphyodus sp. indet.

Bowen, C. F. 1915 A, 118.
Brown, B. 1907 A, 842.
Cretaceous (Hell Creek); Montana

BELONORHYNCHIDÆ Woodward.

Woodward, A. S. 1888 K, 356.
Abel, O. 1919 A, 194.
Jordan, D. S. 1923 A, 113.
Nicholson and Lydekker 1889 A, 988.
Raymond, P. E. 1925 B, 551.
Steinmann, G. 1927 A, 75.
Woodward, A. S. 1895 A, 12.
1898 B, 88.
Zittel and Koken 1911 A, 97, fig. 166.
Zittel and Schlosser 1923 A, 95.

BELONORHYNCHUS Bronn. Type *B. striolatus* Bronn.

Bronn, H. G. 1858, Neues Jahrb. Min., etc., 12.
Abel, O. 1919 A, 195, fig. 151.
Nicholson and Lydekker 1889 A, 988.
Woodward, A. S. 1888 K, 354.
1895 A, 9.
1898 B, 88, fig. 65.
Zittel, K. A. 1890 A, 265, fig. 270.
Zittel and Koken 1911 A, 97, fig. 166.
Zittel, Eastman, etc. 1902 A, 74, fig. 133.

Belonorhynchus dayi Raymond.

Raymond, P. E. 1925 B, 551, fig. 1.
Triassic (Upper Banff); Alberta.

ACIPENSEROIDÆ, new form.

Gregory, W. K. 1907 D, 448, 462 (Acipenseroidei).
Sewertzoff, A. N. 1926 A, 523, 528 (Chondrosteoidei).
Traquair, R. H. 1877 B, 8 (Acipenseroidei).

ACIPENSERIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 98.
Hay, O. P. 1902 A, 371.
Abel, O. 1912 F, 518.
1919 A, 197.
Agassiz, L. 1835 B, 331 (Sturiones).
Arldt, T. 1907 D, 635.
1912 A, 716, 762.
1923 A, 492 ("acipenseriden").
Beer, G. R. 1925 A, 671 ("sturgeons").
Berg, L. S. 1904 A, 664 ("acipenseriden").
Bonaparte, C. L. 1833 B, 1202.
1838 B, 131.
Braus, H. 1901 B, 201, 236 ("acipenseriden").
Bridge, T. W. 1896 A, 534.
1904 A, 489, 492, 729.
Carter, J. T. 1905 A, 129.
Carus, V. 1875 A, 595 (Acipenserini).
Cockerell, T. D. A. 1919 A, 171.
Collinge, W. E. 1894 A, 528.
1895 D, 82.
Cope, E. D. 1891 N, 21.
Cunningham, J. T. 1912 A, 246.
Cuvier, G. 1805 A ("esturgeons").
Davidoff, M. 1879 A, 489 ("acipenserinen").
Dean, Gudger, Henn 1923 A, 398, 623.
Dombrowsky, B. A. 1918 A, 203, 204.
Dormitzer, M. 1852 A, 63 ("störe").
Duméril, A. 1870 A, 86, pls. xv-xix.
Eastman, C. R. 1908 A, 256 (Acipensiderida).
Ebner, V. 1896 A, 138 ("acipenseriden").
Filatoff, D. 1907 A, 309.
Fitzinger, L. J. 1873 A, 52 (Acipenseres).
Fürbringer, M. 1902 A, 186 ("acipenseriden").
Gegenbaur, C. 1879 A, 521 ("störe").
Gill, T. 1875 B, 252.
Goetsch, W. 1920 A, 514 ("acipenseriden").
Goodrich, E. S. 1909 A, 318.
Gregory, W. K. 1907 D, 448.
Haeckel, E. 1868 A, 445 (Accipenserides).
Hase, A. 1907 A, 658 ("sturionen").
Heckel, J. 1850 A, 366 ("sturionen").
1851 A, 219 (Acipenserini).
Hennig, E. 1906 A, 173.
Hoernes, R. 1886 A, 549.
Jaekel, O. 1906 C, 157 ("störe").
1906 D, 180 (Acipenseroidei).
1919 A, 104 ("acipenseriden").
1926 D, 70 ("störe").
Jordan, D. S. 1905 A, ii, 18, 555.
1907 B, 254, 761.
1923 A, 113.
Jordan and Gilbert 1882 A, 84.
Kiaer, J. 1924 A, 97, 108 (Acipenseroidei).
Kindred, J. E. 1919 A, 36.
Kingsley, J. S. 1885 A, 92.
Köstlin, O. 1844 A ("störe").
Kurz, —— 1925 A, 37 ("acipenseriden").
Leunis and Ludwig 1883 A, 771.

Luther, A. 1913 A, 6 ("acipenseriden").
Lütken, C. 1871 A, 293 ("esturgeons").
Meek, A. 1916 A, 48.
Meissner, W. 1907 A, 465.
1907 B, 5.
Meunier, S. 1903 A, 774 ("esturgeons").
Owen, R. 1845 B, 68 (Sturionidæ).
1848 B, 86 ("sturgeons").
1866 A, 12, 41, 246, 478 (Sturionidæ).
Parker, W. K. 1881 C, 71.
1888 C, 399 ("sturgeons").
1890 A, 62.
Pompeckj, J. F. 1913 A, 1139 (Accipenseridæ).
1926 A, 71.
Rabl, C. 1901 A, 475, 479 ("störe").
Rauther, M. 1913 A, 1099.
Richardson, J. 1836 A, 278 (Sturionideæ).
Sagemehl, M. 1883 A ("acipenseriden").
Sewertzoff, A. N. 1923 A, 400 ("accipenseriden").
1923 B.
1924 A, 578 ("sturgeons").
Sewertzoff, A. N. 1925 A, 274 ("acipenseriden").
1926 A, 514, 523.
1926 B, 548.
1926 C, 42 ("acipenseriden").
1926 E, 556.
Stannius, H. 1854 A (Acipenserini).
Steinmann, G. 1927 A, 80 ("accipenseriden").
Stensiö, E. A. 1925 A, 14, 176, 216, 224.
1925 B, 162.
Stephan, P. 1900 A, 291, 319 ("acipenseridés").
Stromer, E. 1925 B, 357, 364.
Trouessart, E. L. 1906 A, 212.
Wallace, A. R. 1876 A, II, 459 (Accipenseridæ).
Watson, D. M. S. 1925 A, 815, 824, 863, 864.
Whitehouse, R. H. 1910 B, 593.
Woodward, A. S. 1911 C, 46 ("sturgeons").
1924 A, 113.
Zittel and Koken 1911 A, 95 (Accipenseroidei).
Zittel and Schlosser 1923 A, 95.
Zittel and Woodward 1902 A, 74.
Zograf, N. 1887 A, 70.

ACIPENSER Linn. Type *A. sturio* Linn.

Hay, O. P. 1902 A, 371.
Abel, O. 1912 F, 658.
1919 A, 23, figs. 2, 14.
Adams, L. A. 1919 A, 68, pl. i.
Ahlborn, F. 1896 B, 1 ("stör").
Alessandrini, A. 1849 A, 377, pl. xxiv, fig. 4.
Allis, E. P. 1897 A, 19.
1898 B, 93.
1903 A, 662.
1905 A, 478.
1909 A, 213.
1915 A.
1922 C, 13.
1925 A, 77.
1926 A, 166.
Bardeleben, K. 1901 A, 66 ("störe").
1903 A, 22 ("störe").
Baudelot, E. 1873 A, 94 (Accipenser).
Beer, G. R. 1924 C, 337.
1925 A, 671, figs. 1-20.
1926 A, 277, figs. 14-19, 110, 118, 119.
Berg, L. S. 1904 A, 666.
Bliss, R. 1875 A. 386 ("sturgeon").
Brandt, J. F. 1865 A, 7.
Braus, H. 1901 B, 201, pls. xxv, xxvi, xxvii, xxix.
1906 A, fig. 197.
1919 A, 2, fig. 13.
Bridge, T. W. 1878 A, 689, 717, text-fig.
1896 A, 534.
1904 A, 492, 729.
Bronn, H. G. 1848 A, 7.
1849 A, 653.
Collinge, W. E. 1894 A, 521.
1895 D, 80 (Accipenser).
Connell, A. 1835 A, 301.
Cunningham, J. T. 1897 A, 493 ("sturgeon").
Cuvier, G. 1815 A, 125 ("esturgeon").
Davidoff, M. 1879 A, 487, fig. 7.
Dean, B. 1895 C, 734.
1896 D, 338.
Dean, Gudger, Henn 1923 A, 667.
Dendy, A. 1907 A, 295.
Derjugin, K. M. 1909 A.
Derjugin, K. M. 1910 A, 629.
Dollo, L. 1889 E, 152 ("esturgeon").
1904 C, 235.
Dombrowsky, B. A. 1918 A, 201, 204, figs. 6-8.
Duméril, A. 1856 A, 156 ("esturgeon").
1870 A, 20, 84.
Edgeworth, F. H. 1925 A, 240.
1926 A, 178, figs. 4-12.
Eichwald, E. 1832 A, 886 ("stör").
Elliott, A. I. M. 1907 A, 648 (Accipenser).
Fitzinger and Heckel 1836 A, 261, pls. xxv-xxx.
Froriep, A. 1905 A, 156 ("esturgeon").
Gaupp, E. 1897 A, 537.
1898 B, 845, 850.
1905 D, 900.
1906 B.
1911 A, 419.
Gegenbaur, C. 1866 A, 125 ("störe").
1867 A, 60 ("störe").
1867 B, 420, pl. ix, fig. 20.
1879 A, 523.
Giebel, C. G. 1855 A, 113 (Accipenser).
Goetsch, W. 1920 A, 514.
Goette, A. 1901 A, 552.
Goodrich, E. S. 1901 A, 314, fig. C.
1904 A, 479, fig. 3.
1906 A, 347.
1909 A, 505, figs.
Gregory, W. K. 1904 A, 57.
1915 D, 347, fig. 4.
Hague, F. 1924 A, 274.
Haller, B. 1906 A, 255.
Hamburger, R. 1904 A, 75, 82.
Hase, A. 1913 A, 147, fig. 68.
Hasse, C. 1893 C, 76, pl. v.
Heckel, J. 1851 A, 219.
Heilprin, A. 1887 A, 68, 69 (Accipenser).
Hoeven, J. 1822 A.
Huxley, T. H. 1863 F, 425, figs. 35, 36.
1876 E, 118.
Inms, A. D. 1904 A, 33.
Jaekel, O. 1902 C, 610 (Accipenser).
1906 D, 181, figs. 4, 6.

Jaekel, O. 1913 A, 85 ("störe").
1921 A, 222, fig. 4.
1926 A, 161, 171.
1926 B, 43 ("störe").
1926 D, 70.
1928 A, 43 ("störe").
Jordan, D. S. 1905 A, ii, 18, 555.
1907 B, 254.
Jordan and Evermann 1917 A, 11.
Jordan and Gilbert 1882 A, 85.
Kesteven, H. L. 1922 A, 314.
1926 A, 139.
Kiaer, J. 1924 A, 97, 109, figs. 43, 48.
Kingsley, J. S. 1925 A, 28, 96, 99, 100, 230, figs. 28, 102, 106, 243.
Klaatsch, H. 1890 A, 146, 245.
1893 B, 657 ("störe").
1893 C, 181 (Accipenser).
Klein, E. E. 1868 A (Accipenser).
Köstlin, O. 1844 A ("stör").
Kupffer, C. 1893 A, 518.
Kurz, —— 1925 A, 36-68, figs. 1-9.
Lakjer, T. 1927 A, 279, fig. 103.
Lebedinsky, N. G. 1917 A, 315.
Leunis and Ludwig 1883 A, 772.
Luther, A. 1913 A, 15, figs. 4, 6, 7, 10.
1913 B, 6, figs. 1, 2, 6, 7, 23, 24.
McMurrich, J. P. 1883 A, 634.
Meckel, J. F. 1825 A ("störe").
Meeke, A. 1916 A, 49.
Meissner, W. 1907 A, 465.
1907 B, 1, pls. i, ii; text-figs.
Mivart, St. G. 1879 B, 540 ("sturgeon").
Molin, R. 1851 A, 357, pl. xv.
Mollier, S. 1897 A, pls. i-x.
Nauck, E. T. 1926 B, 73.
Norman, E. W. 1926 A, 455.
Owen, R. 1848 B, 101.
1866 A, 74, 196, figs. 62, 125.
Parker, W. K. 1873 B, 254 (Accipenser).
1881 C, 71.
Parker and Bettany 1877 A, 86 ("sturgeon").
Pehrson, T. 1922 A, 9.
Price, P. H. 1927 A, 279, text-fig. 2.
Priem, F. 1908 B, 132, pl. iii, fig. 1; pl. iv, figs. 1-4.
Pütter, A. 1923 A, 220.
Rabl, C. 1901 A, 481.
Rauther, M. 1913 A, 1068, figs. 19, 21.
Reynolds, S. H. 1897 A, 531, fig. 18.
Ridewood, W. G. 1896 A, 389, fig. 18.
1921 A, 329.
Ryder, J. 1885 E, 95.
Salensky, W. 1899 B, 298.
Schauinsland, H. 1906 A, 430.
Schlosser, M. 1917 A, 142.
Schmalhausen, J. J. 1912 A, 525, 558, pl. xv.
1913 A, 16.
1913 B, 742, 747.
1913 C, pls. i, v.
1917 A, 108.
1923 A, 538, fig. 4.
Sewertzoff, A. 1896 A, 219, 274, pls. iv, v.
1918 A, 206.
1923 B, figs. 1, 3, 4.
1926 A, 451-540, figs. 1-37.
1926 B, 547, figs. 1-23.
Sewertzoff, A. 1926 C, 42.
1926 E, 523, figs. 1-38.
Shann, E. W. 1919 A, 556.
Shepherd, C. E. 1910 B, 298.
Stadtmüller, F. 1926 A, 160, fig. 6.
Stannius, H. 1854 A.
Stanton and Hatcher 1905 A, 50.
Starks, E. C. 1916 A, 12.
Stensiö, E. A. 1921 A, 273.
1925 A, *passim*, text-fig. 15.
1925 B, 106.
Stephan, P. 1900 A, 339.
Stromer, E. 1925 B, 358.
Sushkin, P. P. 1927 A, 268, fig. 1.
Taylor, H. F. 1916 A, 298.
Traquair, R. H. 1912 A, 168.
Wagner, R. 1843 A.
Wallace, A. R. 1876 A, ii, 459 (Accipenser).
Watson, D. M. S. 1923 A, 471.
1925 A, 831, 848, 850, 864.
Weber, E. H. 1821 A, 1065.
Whitehouse, R. H. 1910 B, 593, pl. xlvii, fig. 2.
1918 A, 139.
Wiedersheim, R. 1880 C, 128.
Wiman, C. 1918 A, 93, fig. 7.
Woodward, A. S. 1890 G, 104, figs. 4, 8.
1922 C, 87, fig. 95.
Zittel and Koken 1911 A, 95 (Accipenser).
Zittel and Schlosser 1923 A, 95, figs. 18-21.
Zograf, N. 1887 A, 70.
1896 B, 320.

Acipenser albertensis Lambe.

Lambe, L. M. 1902 A, 29, pl. xxi, fig. 9.
Bowen, C. F. 1915 A, 118, 148, 149, 150.
Brown, B. 1914 E, 378.
Cockerell, T. D. A. 1908 C, 163.
1919 A, 172.
Hatcher, J. B. 1905 B, 69.
Lambe, L. M. 1904 C, 21, 36, 43.
1917 E, 293 (This species?).
Matthew, W. D. 1916 A, 485 (Accipenser).
Osborn, H. F. 1902 I, 11, 16.
Peale, A. C. 1912 A, 754 (Accipenser).
Stromer, E. 1925 B, 357.
Williston, S. W. 1902 K, 953.
Upper Cretaceous (Belly River); Alberta: (Judith R.); Montana: (Lance); Wyoming.

Acipenser medirostris Ayres.

Ayres, W. O. 1854, Proc. Calif. Acad. Sci., 1, 15.
Hay, O. P. 1927 D, 216.
Jordan, D. S. 1907 A, 128 (This species?).
Jordan and Evermann 1896 A, 104.
Miller, L. H. 1912 A, 71 (This species?).
Sinclair, W. J. 1904 A, 18 (This species?).
Recent; Pacific coast north of San Francisco: Pleistocene?; California?

Acipenser ornatus Leidy.

Hay, O. P. 1902 A, 371.
Miocene; Virginia.

Acipenser sturio Linn.

Linnæus, C. 1758 A, 237.
Hay, O. P. 1923 A, 311.

Jordan and Evermann 1896 A, 105.
Leidy, J. 1889 H, 19.
Recent; Atlantic coasts of Europe and America: Pleistocene? Pennsylvania?

Acipenser sp. indet.

Sternberg, C. M. 1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

Suborder POLYODONTIFORMES, new name.

Gill, T. 1872 C, 22 (Selachostomi).
1909 B, 838 (Selachostomi).
Jordan, D. S. 1905 A, ii, 20, 591 (Selachostomi).
1907 B, 256, 761 (Selachostomi).
1923 A, 113 (Selachostomi).

POLYODONTIDÆ Bonaparte.

Bonaparte, C. L. 1838 B, 131.
Hay, O. P. 1902 A, 371.
Abel, O. 1912 F, 476 (Polyodon).
1919 A, 196.
Adams, L. A. 1919 A, 66, pl. i (Polyodon).
Allis, E. P. 1903 A, 659 (Polyodon).
1915 A, (Polyodon).
1918 B, 25, 260 (Polyodon).
1919 A, 370 (Polyodon).
Arldt, T. 1907 D, 682 (Spatularidæ).
1912 A, 648, 650, 658, 662, 670, 678, 690, 716, 762.
1923 A, 492 ("polyodontiden").
Bonaparte, C. L. 1840 A, 47.
Bridge, T. W. 1878 A, 683, pls. lv-lvii (Polyodon).
1896 A, 536.
1897 B, 722, fig. 1 (Polyodon).
1904 A, 489, 491, 751.
Collinge, W. E. 1894 A, 528.
1895 C (Selachoidei).
1895 D, 82.
Cope, E. D. 1891 N, 21.
Cunningham, J. T. 1912 A, 246.
Davidoff, M. 1879 A (Polyodon).
Dean, Gudger, Henn 1923 A, 623.
Duméril, A. H. A. 1870 A, 271 ("polyodontidés").
Eastman, C. R. 1908 A, 256.
Egerton, P. G. 1858 B, 233 (Chondrosteus).
Forbes, W. A. 1879 A, 364 (Polyodon).
Fürbringer, M. 1902 A, 186 ("polyodontiden").
Gaupp, E. 1905 D, 900 (Polyodon).
Gegenbaur, C. 1879 A, 522 (Polyodon).
Gill, T. 1901 A, 307 (Polyodon).
1905 A, 659.
Goodrich, E. S. 1909 A, 317.
Günther, A. C. 1881 A, 687.
Huxley, T. H. 1863 F, 425, fig. 34 (Spatularia).
1876 E, 116 (Polyodon).
Imms, A. D. 1904 A, 22 (Polyodon).
Jordan, D. S. 1905 A, ii, 20, 587.
1907 B, 256, 761.
Jordan, D. S. 1923 A, 113.
Jordan and Gilbert 1882 A, 82.
Kesteven, H. L. 1926 A, 139 (Polyodon).
Kingsley, J. S. 1925 A, 32, fig. 35 (Polyodon).
Köstlin, O. 1844 A ("spatulariden").
Lakjer, T. 1927 A, 289, fig. 102 (Polyodon).
Leunis and Ludwig 1883 A, 773.
Luther, A. 1913 A, 8, figs. 2, 3, 9, 10 (Polyodon).
1913 B, 9, figs. 3, 5, 14, 22 (Polyodon).
Meckel, J. F. 1825 A (Polyodon).
Meek, A. 1916 A, 51.
Meissner, W. 1907 B, 32 (Polyodon).
Mivart, St. G. 1878 B, 331 (Polyodon).
Owen, R. 1845 B, 68 (Spatulariæ).
1848 B, 86 (Polyodon).
1866 A, 39, 612 (Planirostra).
1868 A, 901 (Planirostra).
Rabl, C. 1901 A, 479 ("polyodontiden").
Rauther, M. 1913 A, 1099.
Reynolds, S. H. 1897 A, 32, 66.
Scharff, R. F. 1911 A, 88 (Polyodon).
Sewertzoff, A. N. 1923 B.
1926 A, 513, 524.
1926 E, 560 (Spatularidæ).
Stannius, H. 1854 A (Spatulariæ).
Stensiö, E. A. 1925 A, 120, 216, 224 ("polyodontids").
Stromer, E. 1925 B, 357, 358.
Traquair, R. H. 1912 A, 168.
Wagner, G. 1904 A, 555.
Wagner, R. 1843 A (Polyodon).
Wallace, A. R. 1876 A, ii, 459.
Watson, D. M. S. 1925 A, 829, 850, 864, figs. 7, 8 (Chondrosteus).
Whitehouse, R. H. 1910 B, 594, pl. xlvii, fig. 3.
Wiedersheim, R. 1881 B, 327 (Polyodon).
Young, J. 1866 D, 234 (Chondrosteus).
Zittel and Koken 1911 A, 96.
Zittel and Schlosser 1923 A, 95.
Zittel and Woodward 1902 A, 74.
Zograf, N. 1887 A, 70 (Polyodon).

CROSSOPHOLIS Cope. Type *C. magnicaudatus* Cope.

Hay, O. P. 1902 A, 372.
Arldt, T. 1923 A, 493.
Bridge, T. W. 1904 A, 492.
Jordan, D. S. 1920 C, 434 (Crossophilus).
Traquair, R. H. 1900 C, 507.
1912 A, 168.
Zittel and Koken 1911 A, 96.
Zittel and Schlosser 1923 A, 95.
Zittel and Woodward 1902 A, 74.

Crossopholis magnicaudatus Cope.

Hay, O. P. 1902 A, 372.
Cockerell, T. D. A. 1908 C, 162.
Hussakof, L. 1908 A, 69.
Jordan, D. S. 1905 A, ii, 21.
1907 B, 257.
Eocene (Green River); Wyoming.

Order PYCNODONTÆ Agassiz.

Unless otherwise indicated the authors, as cited, use the term *Pycnodonti* for this order.

Agassiz, L. 1832 A, 141 (Pycnodontæ).
Hay, O. P. 1902 A, 372.
Agassiz, L. 1833 A, 478 (Pyconodontæ).
1844 C, 267 ("pycnodontes").
1844 D, 142 ("pycnodontes").
Bronn, H. G. 1849 A, 780, seq. (Pycnodontes).
Carus, V. 1875 A, 592 (Pycnodontini).
Deecke, W. 1913 A, 87 ("pycnodonten").
Diener, C. 1909 A, 49.
Egerton, P. G. 1849 A, 329.
1854 A, 369.
Fitzinger, L. J. 1873 A, 50 (Pycnodontes).
Fowler, H. W. 1911 A, 145.
Frost, G. A. 1913 A, 219 (Dapedius).
Giebel, C. G. 1855 A, 111, 112, 113 (Pycnodontes).
Gregory, W. K. 1907 D, 448, 465.
Jordan, D. S. 1923 A, 114.
Kingsley, J. S. 1885 A, 94 (Pycnodontini).
Hennig, E. 1906 A, 137 ("pyknodonten").
Hennig, E. 1907 A, 36 ("pyknodonten").
Hoernes, R. 1886 A, 552 (Lepidopleuridæ).
Huxley, T. H. 1861 D, 448 ("pycnodonts").
1862 A, l.
1867 F, 167 (Pycnodonta).
Jaekel, O. 1911 A, 69, 84.
Jordan, D. S. 1905 A, ii, 22.
1907 B, 258, 761.
Lütken, C. 1868 C (Pycnodontes).
Pompeckj, J. F. 1913 A, 1139, 1142.
Priem, F. 1908 B, 15 ("pycnodontes").
Regan, C. T. 1909 B, 76 (Pycnodontoidei).
Sauvage, E. 1867 A, 75 ("pycnodontes").
Steinmann, G. 1927 A, 17, 64 ("pycnodonten").
Stromer, E. 1905 C, 185 (Euganoidei).
1925 B, 348, 350, 365 (Pycnodonti).
Woodward, A. S. 1893 F, 433, 487 ("pycnodonts").
1917 B, 385 ("pycnodonts").
Zittel and Koken 1911 A, 102.
Zittel and Schlosser 1923 A, 102.

PYCNODONTIDÆ Owen.

Owen, R. 1846 E, 50.
Hay, O. P. 1902 A, 372.
Abel, O. 1912 F, 488 ("pycnodontiden").
1919 A, 205.
1922 F, 77.
Agassiz, L. 1835 B, 331 (Pycnodontes).
1835 H, 225 (Pycnodontæ).
Arldt, T. 1907 D, 678.
1923 A, 495 ("pycnodontiden").
Bridge, T. W. 1904 A, 498.
Cunningham, J. T. 1897 A, 498.
Dean, Gudger, Henn 1923 A, 398, 623.
Eastman, C. R. 1898 E, 183 ("pycnodonts").
Egerton, P. G. 1877 A, 54 ("pycnodonts")
Fowler, H. W. 1911 A, 145.
Goodrich, E. S. 1908 A, 767.
1909 A, 337.
Gregory, W. K. 1907 D, 448.
1923 A, 238, 240.
Heckel, J. 1850 B, 143 ("pycnodonten").
Heilprin, A. 1887 A, 94.
Hennig, E. 1906 A, 137.
Hermann, R. 1907 A, 195, fig. 1 ("pycnodonten")
Hoernes, R. 1886 A, 553.
Jordan, D. S. 1905 A, ii, 22.
1907 B, 258, 761.
Jordan, D. S. 1923 A, 114.
Leriche, M. 1910 A, 462, 465 ("pycnodontidés").
Leunis and Ludwig 1883 A, 776.
Lütken, C. 1871 A, 288 ("pycnodontiens").
Owen, R. 1866 A, 12, 378.
Priem, F. 1903 A, 403 ("pycnodontes").
Regan, C. T. 1923 B, 455, 456.
Sauvage, H. E. 1902 A, 542 ("pycnodontes").
Savornin, J. 1915 A, 368.
Schlosser, M. 1917 A, 135, 136, 138, 140, 142, 148 ("pycnodontiden").
Scupin, H. 1896 A, 173, 184.
Steinmann, G. 1907 A, 411.
Stromer, E. 1905 C, 185.
Watson, D. M. S. 1925 A, 866 ("pycnodonts").
Woodward, A. S. 1893 F, 433.
1898 B, 101.
1907 A, 194.
1912 A, (1909), 162.
1921 A, 181.
1921 C, 181.
1922 C, 91.
Zittel and Koken 1911 A, 102 (No family name).
Zittel and Schlosser 1923 A, 102 (No family name).
Zittel and Woodward 1902 A, 85.

MACROMESODON Blake. Type *Gyrodus macropterus* Agassiz.

Blake, J. F. 1905 A, 32.
Unless otherwise indicated the authors, as quoted, apply to this genus the name *Mesodon*. This is, however, preoccupied.
Hay, O. P. 1902 A, 372 (Typodus; preoccupied).
Arldt, T. 1923 A, 495.
Deecke, W. 1913 A, 83.
Giebel, C. G. 1855 A, 112.
Goodrich, E. S. 1909 A, 337, 339, fig. 319.
Gorjanovic-Kramberger, K. 1905 A, 219.
Heckel, J. J. 1850 A, 361, 365.
Hennig, E. 1906 A, 172, 199.
1907 A, 360.
Jordan, D. S. 1923 A, 114 (Typodus, preoccupied).
Sauvage, H. E. 1902 A, 545.
Steinmann, G. 1927 A, 54, text-fig. 14.
Traquair, R. H. 1911 A, 29.
Woodward, A. S. 1890 C, 296.
1910 B, 468.
Zittel and Koken 1911 A, 103.
Zittel and Schlosser 1923 A, 103.
Zittel and Woodward 1902 A, 87.

Macromesodon abrasus (Cragin).

Hay, O. P. 1902 A, 372 (Typodus).
Lower Cretaceous (Fredericksburg); Kansas.

Macromesodon diastematicus (Cope).

Hay, O. P. 1902 A, 372 (Typodus).
1917 B, 4 (Typodus).
Montgomery, T. H. 1904 A, 57 (Mesodon).
Lower Cretaceous (Fredericksburg); Texas.

Macromesodon dumblei (Cope).

Hay, O. P. 1902 A, 373 (Typodus).
1917 B, 4 (Typodus).
Montgomery, T. H. 1904 A, 56 (Microdus); 57 (Mesodon dumblianus).
Lower? Cretaceous; Texas.

Macromesodon valens Hay.

Hay, O. P. 1917 B, 5, pl. i, fig. 2 (Typodus).
Lower Cretaceous; Texas.

PROSCINETES Gistel. Type *Microdon elegans* Agassiz.

Gistel, J. 1848, Naturges. Thierr. f. höhere Schulen, x (To replace *Microdon*, preoccupied). Unless otherwise indicated the authors, as cited, use for this genus the preoccupied name *Microdon*.
Agassiz, L. 1883 A, 479.
1835 H, 228.
Arldt, T. 1923 A, 495.
Bronn, H. G. 1848 A, 725.
1849 A, 667.
Coulon, L. 1903 A, 147.
Deecke, W. 1913 A, 83.
Egerton, P. G. 1855 A, 8 L, 1.
Giebel, C. G. 1855 A, 111.
Goodrich, E. S. 1909 A, 337, fig. 317.
Hay, O. P. 1899 E, 788 (Polysephus).
1917 B, 6 (Pycnomicrodon, *laps. mem.*).
Heckel, J. J. 1850 A, 361.
1856 A, 201.
Hennig, E. 1906 A, 172, 199.
Jordan, D. S. 1919, Proc. Acad. Nat. Sci. Phila., 1918, 336 (Proscinetes).
1919 B, 237 (Proscinetes).
Owen, R. 1845 B, 73, pl. xliii, fig. 1.
Pompeckj, J. F. 1913 A, 1143.
Priem, F. 1911 C, 10, pl. iii.
Steinmann, G. 1927 A, 50.
Vetter, B. 1881 A, 33.
Woodward A. S. 1917 B, 385.
1919 A (1918), 445, fig. 1.
Zittel and Koken 1911 A, 102.
Zittel and Schlosser 1923 A, 102, figs. 172, 173.
Zittel and Woodward 1902 A, 86.

Proscinetes texanus (Gidley).

Gidley, J. W. 1913 C, 445, figs. 1, 2 (Microdon).
Hay, O. P. 1917 B, 6 (Pycnomicrodon).
Lower Cretaceous; Texas.

CŒLODUS Heckel. Type *C. saturnus* Heckel.

Hay, O. P. 1902 A, 373.
Coulon, L. 1903 A, 149.
Egerton, P. G. 1877 A, 49, pl. iii, fig. 1.
Goodrich, E. S. 1909 A, 337, fig. 317.
Hennig, E. 1906 A, 188.
Jordan, D. S. 1919 B, 270.
Leriche, M. 1906 C, 413.
Priem, F. 1903 A, 403.
1908 B, 70, pl. ii, fig. 4.
1909 B, 325.
Sauvage, H. E. 1902 A, 550.
Schlosser, M. 1917 A, 138, 140.
Steinmann, G. 1927 A, 50.
Storms, R. 1891 A, 150.
Woodward, A. S. 1893 F, 488, 491.
1895 G, 208, pl. viii.
1896 E, 70.
1912 A (1909), 165, text-figs. 46, 47.
1917 B, 386.
1919 A (1918), 64, text-fig. 24.
Zittel and Koken 1911 A, 104.
Zittel and Schlosser 1923 A, 105.
Zittel and Woodward 1902 A, 88.

Cœlodus brownii Cope.

Hay, O. P. 1902 A, 373.
Gidley, J. W. 1913 C, 447.
Lower Cretaceous (Comanche); Oklahoma.

Cœlodus decaturensis Gidley.

Gidley, J. W. 1913 C, 447, fig. 4.
Hay, O. P. 1917 B, 7.
Lower Cretaceous; Texas.

Cœlodus fabadens Gidley.

Gidley, J. W. 1913 C, 446, fig. 3.
Hay, O. P. 1917 B, 7.
Lower Cretaceous; Texas.

Cœlodus stantoni Williston.

Hay, O. P. 1902 A, 373.
Gidley, J. W. 1913 C, 447.
Lower Cretaceous (Kiowa shales); Kansas.

PYCNODUS Agassiz. Type *Zeus platessus* Blainv.

Hay, O. P. 1902 A, 373.
Agassiz, L. 1833 A, 479.
1835 H, 229.
Arldt, T. 1923 A, 495.
Bronn, H. G. 1848 B, 1064.
1849 B, 665.
Coulon, L. 1903 A, 147.
Egerton, P. G. 1855 A, 8 L, 1, pl. x.
1877 A, 50.
Fowler, H. W. 1911 A, 146.
Heilprin, A. 1887 A, 302.
Hennig, E. 1906 A, 199.
1912 A, 490.
Hoernes, R. 1886 A, 553.
Jordan and Evermann 1917 A, 144.
Leriche, M. 1906 C, 420.
Mantell, G. A. 1844 A, 640, pl. i, fig. 3; text-fig. 131.
Priem, F. 1903 A, 403.
1908 B, 109, fig. 54.

Ryder, J. 1885 E, 95.
Sauvage, E. 1867 A, 77.
Savornin, J. 1915 A, 370.
Schlosser, M. 1917 A, 140, 142.
Stromer, E. 1905 C, 185.
Woodward, A. S. 1917 B, 387.
Zittel and Koken 1911 A, 105.
Zittel and Schlosser 1923 A, 105.
Zittel and Woodward 1902 A, 88.

Pycnodus carolinensis Emmons.

Hay, O. P. 1902 A, 373.
Cretaceous ("Miocene"); North Carolina.

Pycnodus comminuens Hay.

Hay, O. P. 1917 B, 3, pl. i. fig. 1.
Lower Cretaceous; Texas.

Pycnodus phaseolus Hay.

Hay, O. P. 1902 A, 373.
Fowler, H. W. 1911 A, 146, fig. 90.
Upper Cretaceous; Mississippi: (Navesink?); New Jersey.

Pycnodus planidens Hay.

Hay, O. P. 1917 B, 7.
Lower Cretaceous; Texas.

Pycnodus robustus Leidy.

Hay, O. P. 1902 A, 373.
Fowler, H. W. 1911 A, 147, fig. 91.
Cretaceous; New Jersey.

Pycnodus sp. indet.

Hay, O. P. 1902 A, 373. (Triassic (Chatham); North Carolina.

HADRODUS Leidy. Type *H. priscus* Leidy.

Hay, O. P. 1902 A, 373.
Jordan, D. S. 1923 A, 114.

Hadrodus priscus Leidy.

Hay, O. P. 1902 A, 373.
Cretaceous; Mississippi.

ANOMŒODUS Forir. Type *Pycnodus subclavatus* Agassiz.

Forir, H. 1887, Ann. Soc. Géol. Belgique, xiv, Mém., 25.
Leriche, M. 1906 C, 411.
Priem, F. 1909 B, 325.
1912 B, 266.
Woodward, A. S. 1893 F, 487, pls. xvi, xvii.
1893 G, 488, pls. xvi, xvii.
1895 A, 258.
1895 G, 209, pl. viii.
1912 A (1909), 162, pl. xxxv.
1917 B, 387.
Zittel and Schlosser 1923 A, 105.
Zittel and Woodward 1902 A, 88.

Anomœodus latidens Gidley.

Gidley, J. W. 1913 C, 448, fig. 5.
Upper Cretaceous (Selma or Ripley); Mississippi.

Anomœodus mississippiensis Gidley.

Gidley, J. W. 1913 C, 449, fig. 6.
Upper Cretaceous (Coffee Sand of Eutaw or Selma chalk); Mississippi.

Anomœodus sp. indet.

Gidley, J. W. 1926 F, 192, pl. lxxi, fig. 11 (Anomœodus). Upper Cretaceous (Ripley; Tennessee.

URANOPLOSUS Sauvage. Type *U. cotteaui* Sauvage.

Hay, O. P. 1902 A, 373.
Sauvage, H. E. 1902 A, 547.

Uranoplosus arctatus Cope.

Hay, O. P. 1902 A, 373.
Lower Cretaceous (Comanche); Oklahoma.

Uranoplosus flectidens Cope.

Hay, O. P. 1902 A, 373.
Lower Cretaceous (Comanche); Oklahoma.

Order HOLOSTEI Müller.

Müller, J. 1845 A, 119, 137.
Hay, O. P. 1902 A, 374.
Allis, E. P. 1905 A, 404, 495.
1915 A, 621.
1918 A, 242.
1918 B, 263.
1919 A, 374.
1919 B, 73.
1919 C, 256.
1922 A, 152.
1922 B.
1923 A, 52.
1923 B, 155.
1925 A, 75.
1926 A, 168.
Arldt, T. 1923 A, 494 ("holostier").
Boulenger, G. A. 1904 A, 162.
Bridge, T. W. 1878 A, 722 (Teleosteoidei).
1904 A, 495.
Bronn, H. G. 1849 A, 830, seq.
Carus, V. 1875 A, 590 (Lepidosteidei).
Cunningham, J. T. 1912 A, 240, 246, 261, 382.
Dean, Gudger, Henn 1923 A, 684.
Dombrowski, B. A. 1925 A, 70, fig. 3.
Ebner, V. 1896 A, 146.
Egerton, P. G. 1852 C, 6 L, 6.
Gaupp, E. 1898 B, 844, 863 ("knochenganoiden").
Gegenbaur, C. 1866 A, 123.
Goodrich, E. S. 1909 A, 321.
Greene, J. R. 1861 A, 227.

Gregory, W. K. 1907 D, 448, 464, pl. xxix (Lepidosteoidei).
1920 A, 220.
1923 A, 238.
Hase, A. 1913 A, 147.
Hasse, C. 1893 C, 76 ("knochenganoiden").
Hilzheimer, M. 1913 A, 471 ("knochenganoiden").
Hubbs, C. L. 1919 A, 570.
Jaekel, O. 1911 A, 69, 73.
Jordan, D. S. 1905 A, ii, 23, 578 (Lepidostei).
1907 B, 259, 761 (Lepidostei).
1923 A, 115.
Kehrer, F. A. 1896 A, 352 ("knochenganoiden").
Kingsley, J. S. 1885 A, 92.
Klaatsch, H. 1893 B, 655 ("knochenganoiden").
Leunis and Ludwig 1883 A, 775 (Euganoidei).
Lönnberg, E. 1901 A.
Luther, A. 1913 B, 12, 22, 52.
Matthes, E. 1921 A, 221 ("knochenganoiden").
Meek, A. 1916 A, 48, 52.
Miall, L. C. 1872 A, 34.
Owen, R. 1845 B, 74 ("sauroids").
Parker, W. K. 1881 C, 71 ("holostean ganoids").
Parker and Haswell 1897 A, 203.
Pehrson, T. 1922 A, 39.
Pompeckj, J. F. 1913 A, 1139, 1141.
Rauther, M. 1913 A, 1100.
Regan, C. T. 1904 A, 346.
1909 B, 76.
1912 B, 838.
1923 B, 457 (Holostei; Neopterygii, in part).
Reynolds, S. H. 1897 A, 67, 68, 105, 110, 114, 121, 126.
Ridewood, W. G. 1896 A, 389.
Romer, A. S. 1924 A, 128, 136.
Ryder, J. 1886 A, 74.
Schlesinger, G. 1909 A, (147).
Schmalhausen, J. J. 1912 A, 529.
1913 A, 61.
1913 C.
1923 B, 544.
Sewertzoff, A. N. 1918 A, 207.
1923 B.
1925 A, 276.
1926 A, 509, 523 ("holosteans").
1926 C, 42.
1926 D, 76, 83.
1926 F, 274.
Solger, B. 1880 A, 367.
Stannius, H. 1854 A.
Stensiö, E. A. 1925 A, *passim* ("ganoids," in part).
Suschkin, P. P. 1910 A, 250.
Swinnerton, H. W. 1905 A, 378 ("holosteans").
Terra, P. 1911 A, 205.
Traquair, R. H. 1880 A, 157 (Lepidosteidæ).
1900 C, 508 (Lepidosteoidei).
Ussow, S. 1900 A, 231 ("knochenganoiden").
Wallace, A. R. 1876 A, ii, 458.
Watson, D. M. S. 1925 A, 816, 851, 863, 868.
Whitehouse, R. H. 1910 B, 595.
Woodward, H. 1878 A, 22 (Lepidosteidæ).

Suborder Lepisosteiformes, new name.

Unless otherwise indicated the writers, as cited, use the name Ginglymodi.
Hay, O. P. 1902 A, 374.
Agassiz, L. 1832 A, 140 (Lepidostei).
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 656.
Beer, G. R. 1926 A, 283 (Lepidosteoidei).
Cockerell, T. D. A. 1913 B, 121.
Cope, E. D. 1871 T, 452.
1891 N, 22.
Goodrich, E. S. 1904 A, 495 (Aëtheospondyli).
1909 A, 340 (Lepidosteoïdei).
Gregory, W. K. 1907 D, 448, 466.
Hoernes, R. 1886 A, 554 (Lepidosteidei).
Huxley, T. H. 1861 D, 442 (Lepidosteidæ).
Jaekel, O. 1911 A, 82 (Lepidostei).
Jordan, D. S. 1905 A, ii, 24, 29, 572.
1907 B, 761.
Jordan, D. S. 1923 A, 115.
Jordan and Gilbert 1882 A, 89.
Kiaer, J. 1924 A, 95 (Euganoida).
Kingsley, J. S. 1885 A, 96.
Pompeckj, J. F. 1913 A, 1145 (Lepidosteoidei).
Regan, C. T. 1909 B, 77.
1912 B, 841 (Aethiospondyli).
1923 B, 459.
Scupin, H. 1896 A, 166, 182.
Stannius, H. 1854 A (Lepidosteini).
Stromer, E. 1912 A, 31 (Lepidostei).
1925 B, 354, 365 (Lepidostei).
Traquair, R. H. 1877 B, 8 (Lepidosteoidei).
1911 A, 16 (Lepidosteoidei).
Zittel and Koken 1911 A, 105 (Orthoganoidei).
Zittel and Schlosser 1923 A, 105 (Orthoganoidei).
Zittel and Woodward 1902 A, 79 (Lepidostei).

LEPIDOTIDÆ Owen.

Unless otherwise indicated the authors, as quoted, use the name Semionotidæ for this family.
Hay, O. P. 1902 A, 374 (Lepidotidæ).
Abel. O. 1906 C, 84.
1912 F, 488 ("semionotiden").
1919 A, 197, fig. 170.
1920 A, 343 ("seminotiden").
1922 F, 77.
Arldt, T. 1907 D, 682 (Sphærodontiræ).
Bridge, T. W. 1904 A, 497.
Carus, V. 1875 A, 590 (Lepidotini).
Deecke, W. 1926 A, 185.
Eastman, C. R. 1905 B, 72.
1911 A, 18, 28, 57.
1914 A, 139, 140.
1917 A, 282.
Fitzinger, L. J. 1873 A, 51 (Lepidoti).
Gill, E. L. 1923 A, 38.
Goodrich, E. S. 1904 A, 495.
1908 A, 769.
1909 A, 334.
Gorjanovič-Kramberger, K. 1905 A, 195.
Gregory, W. K. 1907 D, 448 (Lepidotidæ, Semionotidæ).

Gregory, W. K. 1923 A, 238, 241 (Semionotidæ, Semionotoidea).
Hay, O. P. 1901 B, 72.
Jordan, D. S. 1905 A, ii, 24, 591 (Lepidotidæ, Semionotidæ).
1907 B, 761 (Lepidotidæ).
1923 A, 114.
Pompeckj, J. F. 1913 A, 1142 (Lepidotidæ).
Priem, F. 1908 B, 14 ("sémionotidés").
Regan, C. T. 1923 B, 455, 460.
Schlosser, M. 1917 A, 136, 138 ("stylodontiden," "sphaerodontiden").
Scupin, H. 1896 A, 160, 182 (Sphærodontidæ).
Stensiö, E. A. 1921 A, 253.
1925 A, 224.
Stolley, E. 1920 A, 77, 79 (Lepidotidæ, Semionotidæ).
Swinnerton, H. H. 1925 A, 98 (Semionotidæ).
Traquair, R. H. 1911 A, 16.
Watson, D. M. S. 1925 A, 866 ("semionotids").
Woodward, A. S. 1898 B, 95.
1912 A (1909), 161.
1922 C, 90 (Semionotidæ).
Zittel and Schlosser 1923 A, 108 (Lepidotinæ).
Zittel and Woodward 1902 A, 80 (Stylodontidæ); 81 (Semionotidæ).

LEPIDOTES Agassiz. Type *L. gigas* Agassiz = *Cyprinus elvensis* Blainville.

Agassiz, L. 1832 A, 145.
Unless otherwise indicated the authors here quoted spell the name *Lepidotus*.
Hay, O. P. 1902 A, 374.
Abel, O. 1912 F, 490, fig. 371 C.
1919 A, 201, figs. 156, 157.
1920 A, 343, fig. 543.
Agassiz, A. 1877 A, 124.
Agassiz, L. 1833 A, 474.
1835 H, 213.
1844 C, 265.
Allis, E. P. 1909 A, 201.
Arldt, T. 1923 A, 495.
Bronn, H. G. 1848 A, 632 (Lepidotes, Lepidotus).
1849 A, 659.
Coulon, L. 1903 A, 142.
Cross and Howe 1905 A, 486.
Dabelow, A. 1926 A, 97, fig. 1.
Day, H. 1915 A, 432.
Dean, B. 1914 A, 59.
Dean, Gudger, Henn 1923 A, 623.
Deecke, W. 1913 A, 80, 81.
Drevermann, F. 1912 A, 6, fig.
Eastman, C. R. 1917 A, 278, 282.
Egerton, P. G. 1852 C, 6D, 1, pl. iii.
1854 A, 368.
Frost, G. A. 1913 A, 220.
Gaudry, A. 1896 A, 80, fig. 52.
Gervais, P. 1852 A, explan. pl. lxvii.
1859 A, 516, pl. lxvii.
Gill, E. L. 1923 A, 22.
Goodrich, E. S. 1908 A, 756, 758.
1909 A, 335, fig. 316.
Gregory, W. K. 1923 A, 239.
1924 A, 1.
Heilprin, A. 1887 A, 302.
Hennig, E. 1906 A, 186, fig. 12.
1912 A, 489.
1914 A, 269, pl. xxiii; text-figs. 3, 4.
1915 E, 51.
1920 B, 112.
Hoernes, R. 1886 A, 556.
Huxley, T. H. 1862 A, li.
Jaekel, O. 1905 C, 141, fig. 5.
1906 A, 23, fig. 14.
1911 A, 82, figs. 89, 90.
Jordan D. S. 1917 A, 141 (Lepidotes).
Klaatsch, H. 1890 A, 144.
Lankester, E. R. 1905 A, 250, fig. 179.
Lee, J. E. 1860 A, 458, pl. xii.
Leriche, M. 1902 B, 130 (Lepidotus).
Lütken, C. 1868 C, 44.
1871 A, 287.
Pompeckj, J. F. 1913 A, 1142, fig. 49.
Priem, F. 1908 A, 1, pls. i, ii.
1908 B, 22, 26, 31.
Regan, C. T. 1923 B, 455.
Reynolds, S. H. 1897 A, 110.
Ridewood, W. G. 1896 A, 385, fig. 13.
Sauvage, E. 1867 A, 67.
Schellwien, E. 1901 A.
Schlosser, M. 1917 A, 140.
Scupin, H. 1896 A, 160, pl. ix, figs. 6-8.
Steinmann, G. 1927 A, 12.
Stensiö, E. A. 1921 A, 174.
1925 A, 64.
Stolley, E. 1920 A, 77.
Stromer, E. 1925 B, 352, 359.
Tomes, C. S. 1898 B, 450.
Traquair, R. H. 1900 C, 507.
1911 A, 16.
Watson, D. M. S. 1925 A, 824, 867.
Woodward, A. S. 1888 M, 139.
1896 E, 70.
1898 B, 96, fig. 69.
1906 C, 279.
1908 A, 359, pl. xliii, figs. 1, 2.
1912 A (1909), 161.
1915 B, lxxiii.
1919 A (1916), 26, pls. vi-x; text-figs. 12-18.
1921 A, 181.
1922 C, 91, fig. 97.
Zittel and Koken 1911 A, 108.
Zittel and Schlosser 1923 A, 11, 109, figs. 13, 185-187.
Zittel and Woodward 1902 A, 82.

Lepidotes? lacotanus Gregory.

Gregory, W. K. 1924 A, 1, figs. 1, 2 (Lepidotus?).
Lower Cretaceous (Lacota); South Dakota.

Lepidotes walcotti Eastman.

Eastman, C. R. 1917 A, 283, pl. xii, fig. 4; pl. xiii, fig. 3 (Lepidotus). Triassic; Utah.

Lepidotes sp. indet.

Hay, O. P. 1902 A, 374 (Lepidotus). Cretaceous (Kiowa Shales); Kansas.

ACENTROPHORUS Traquair. Type *A. varians* (Kirkby).

Hay, O. P. 1902 A, 374.
Abel, O. 1919 A, 199.
Arldt, T. 1923 A, 495.
Eastman, C. R. 1905 A, 56.
1905 B, 94 (Acentrophus).
1911 A, 29.
Gill, E. L. 1923 A, 19, text-figs. 1-19.
1923 B, 466, fig. 1.
Gregory, W. K. 1923 A, 239.
Jordan, D. S. 1905 A, ii, 23.
Kirby, J. W. 1862 A, 267 (Palæoniscus varians).
1864 A, 353, pl. xviii, fig. 2 (Palæoniscus varians).
Traquair, R. H. 1900 C, 507.
Watson, D. M. S. 1925 A, 824, 866.
Woodward, A. S. 1915 B, lxxiii.
1924 A, 114.
Zittel and Woodward 1902 A, 80.

Acentrophorus chicopensis Newb.

Hay, O. P. 1902 A, 374.
Eastman, C. R. 1905 B, 94.
1911 A, 28, 71.
Emerson, B. K. 1898 A, 400.
Hussakof, L. 1908 A, 59.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 211.
Triassic (Newark); New Jersey, Connecticut.

SEMIONOTUS Agassiz. Type *S. bergeri* Agassiz.

Hay, O. P. 1902 A, 375.
Abel, O. 1919 A, 200, figs. 153, 154.
Agassiz, L. 1832 A, 144.
1833 A, 474.
1835 H, 212.
1844 C, 265.
1877 A, 124.
Alessandri, G. 1910 A, 66.
Arldt, T. 1907 D, 338.
1923 A, 493 (Ischypterus); 495 (Semionotus).
Barkas, W. J. 1874 D, 551 (Ischypterus).
Bronn, H. G. 1848 B, 1132.
1849 A, 659.
Dean, Gudger, Henn 1923 A, 623.
Deecke, W. 1913 A, 74 (Ischypterus); 80 (Semionotus).
1926 A, 185.
Eastman, C. R. 1905 B, 68, 73, figs. 9-11.
1911 A, 21, 24, 40, 57.
1914 A, 146.
Eaton, G. F. 1903 A, 259.
Emerson, B. K. 1898 A, 400 (Ischypterus).
Giebel, C. G. 1855 A, 113.
Gorjanovic-Kramberger, K. 1905 A, 195.
Gregory, W. K. 1923 A, 239.
Hay, O. P. 1901 B, 72.
Heckel, J. F. 1850 A, 365.
Heilprin, A. 1887 A, 302 (Ischypterus).
Hennig, E. 1915 E, 49.
Hoernes, R. 1886 A, 555.
Huene, F. 1922 H, 153.
1926 E, 7.
Jordan and Evermann 1917 A, 140.
Koken, E. 1893 B, 278.
Philippi and Frech 1903 A, 12, pls. v, vi.
Schellwien, E. 1901 A.
Scupin, H. 1896 A, 168, pl. x, fig. 3.
Steinmann, G. 1907 A, 412.
1927 A, 74, 76.
Stensiö, E. A. 1925 A, 86.
Stolley, E. 1920 A, 76.
Stromer, E. 1925 B, 349.
Swinnerton, H. H. 1925 A, 87.
Traquair, R. H. 1900 C, 507.
Watson, D. M. S. 1923 A, 472.
1925 A, 866.
Woodward, A. S. 1888 M, 138, pl. vi.
1890 E, 367.
Zittel and Koken 1911 A, 106.
Zittel and Schlosser 1923 A, 106, fig. 178.
Zittel and Woodward 1902 A, 80.

Semionotus agassizii (W. C. Redfield).

Hay, O. P. 1902 A, 375 (S. agassizii, S. marshii).
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 80, pl. i; pl. ii, figs. 5, 9, 10, 12; pl. iii, figs. 1, 2; pls. vii, viii (S. marshii a syn.).
1911 A, 28, 61, pls. i, ii; text-fig. 8 (S. agassizii); 63 (Ischypterus marshii).
Eaton, G. F. 1903 A, 260, 264, pl. v, figs. 5, 7, 10, 12; pl. vi, figs. 1, 2 (S. marshii).
Hussakof, L. 1908 A, 98.
Jordan, D. S. 1905 A, ii, 24.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 210, 214 (Ischypterus agassizii, I. marshii).
Redfield, J. H. 1888 A, 30 (Palæoniscus).
Smith, J. H. 1900 A, 500, 503, figs. (Ischypterus).
Triassic (Newark); New Jersey, Massachusetts.

Semionotus alatus (Newb.).

Hay, O. P. 1902 A, 375.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus beardmori (Smith).

Smith, J. H. 1900 A, 502, 503, fig. (Ischypterus).
Eastman, C. R. 1905 A, 65 (Ischypterus beardmorei).
1911 A, 71 (Ischypterus beardmorei).
Triassic (Newark); New Jersey.
A doubtful species.

Semionotus braunii (Newb.).

Hay, O. P. 1902 A, 375.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 93.
1911 A, 28, 71.
Hussakof, L. 1908 A, 99.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 204 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus elegans (Newb.).

Hay, O. P. 1902 A, 375.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 91, pl. xii.
1911 A, 28, 71.
1917 A, 278, 282, pl. xv, fig. 3.
Hussakof, L. 1908 A, 99.
Loper, S. W. 1893 A, 75 (Ischypterus).
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus fultus (J. H. Redfield).

Hay, O. P. 1902 A, 375.
Agassiz, L. 1833 A, 472 (Palæoniscus).
1835 H, 206 (Palæoniscus).
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 83, pl. ii, figs. 1-4; pl ix, text-fig. 12.
1911 A, 28, 63, 64, pl. iii.
Eaton, G. F. 1903 A, 261, pl. v, figs. 1-4.
Hussakof, L. 1908 A, 100.
Lambe, L. M. 1915 B, 120 (This species?).
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 209, 214 (Ischypterus fultus); 214 (I. macropterus).
Powers, S. 1916 A, 115, 121.
Redfield, J. H. 1888 A, 34 (Palæoniscus).
Rogers, A. F. 1924 A, 546.
Schellwien, E. 1901 A, 29 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus gigas (Newb.).

Hay, O. P. 1902 A, 375.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 83.
1911 A, 28.
Hussakof, L. 1908 A, 100.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark), New Jersey.

Semionotus lenticularis (Newb.).

Hay, O. P. 1902 A, 375.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus lineatus (Newb.).

Hay, O. P. 1902 A, 375.
Eastman, C. R. 1905 B, 89, pls. x, xi.
1911 A, 28, 71.
Hussakof, L. 1908 A, 100.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus micropterus (Newb.).

Newberry, J. S. 1888 A, 31, pl. iv, figs. 1, 2; pl. xii, fig. 2 (Ischypterus).
Hay, O. P. 1902 A, 375.
Eastman, C. R. 1905 B, 87, pl. ii, figs. 6-8, 11, 13; text-fig. 13.
1911 A, 28, 67, pl. iv.
1914 A, 146, pl. xxxii, fig. 1.
Eaton, G. F. 1903 A, 263, pl. v, figs. 6-8, 11, 13.
Hussakof, L. 1908 A, 100.
Lull, R. S. 1917 D, 109.
Lyman, B. S. 1894 A, 209 (Ischypterus).
Triassic (Newark); Connecticut.

Semionotus minutus (Newb.).

Hay, O. P. 1902 A, 375.
Eastman, C. R. 1911 A, 71.
Hussakof, L. 1908 A, 101.
Lyman, B. S. 1894 A, 209 (Ischypterus).
Triassic (Newark); Connecticut.

Semionotus modestus (Newb.).

Hay, O. P. 1902 A, 376.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus newberryi (Loper).

Loper, S. W. 1893 A, 75, fig. 2 (Ischypterus).
Eastman, C. R. 1905 A, 651.
Loper, S. W. 1899 A, 98 (Ischypterus).
Triassic (Newark); Connecticut.
A doubtful species.

Semionotus ovatus (W. C. Redfield).

Hay, O. P. 1902 A, 376.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 78, pls. 4-6.
1911 A, 28, 69.
Eaton, G. F. 1903 A, 266.
Hussakof, L. 1908 A, 100.
Lansing, G. Y. 1854 A, 62 ("Eschypterus," This species?).
Lull, R. S. 1917 D, 110.
Lyman, B. S. 1894 A, 205, 208, 209, 214 (Ischypterus).
Philippi and Frech 1903 A, 12, pl. vi.
Redfield, J. H. 1888 A, 27 (Palæoniscus).
Smith, J. H. 1900 A, 504, fig. (Ischypterus).
Woodward, A. S. 1890 E, 367 ("Tetragonolepis," This species?).
Triassic (Newark); New Jersey, Connecticut, Virginia.

Semionotus parvus (W. C. Redfield).

Hay, O. P. 1902 A, 376.
Eastman, C. R. 1911 A, 71.
Loper, S. W. 1893 A, 75 (Ischypterus).
Lyman, B. S. 1894 A, 205, 209, 210, 214 (Ischypterus).
Triassic (Newark); Massachusetts.

Semionotus robustus (Newb.).

Hay, O. P. 1902 A, 376.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Eastman, C. R. 1905 B, 79.
1911 A, 29.
Hussakof, L. 1908 A, 100.
Lull, R. S. 1917 D, 110.
Lyman, B. S. 1894 A, 214 (Ischypterus).
Triassic (Newark); New Jersey.

Semionotus tenuiceps (Agassiz).

Hay, O. P. 1902 A, 376.
Bayley, Kümmel, and Salisbury 1914 A, 13.
Bronn, H. G. 1849 A, 658 (Eurynotus).
Eastman, C. R. 1905 B, 86.
1911 A, 29, 63, 66.

Eaton, G. F. 1903 A, 265.
Hobbs, W. H. 1901 A, 56.
Hussakof, L. 1908 A, 101.
Lull, R. S. 1917 D, 110.
Lyman, B. S. 1894 A, 205, 209, 214 (Ischypterus); 210 (Ischypterus latus, I. tenuiceps).
Newberry, J. S. 1888 A, 32, pl. v, figs. 1-3; pl. vii, fig. 3; 46, pl. xiii, fig. 3 (Ischypterus latus).
Redfield, J. H. 1888 A, 46 (Palæoniscus).
Shellwien, E. 1901 A, 29 (Ischypterus).
Triassic (Newark); Massachusetts, Connecticut, New Jersey.

Semionotus sp. indet.

Hitchcock, E. 1823 A, 76, pl. figs. 1, 2 ("ichthyolites"). Triassic (Newark); Massachusetts.
Loper, S. W. 1899 A, 98, fig. 2 ("fish"). Triassic (Newark); Connecticut.

Tetragonolepis Bronn. Type *T. semicincta* Bronn.

Bronn, H. G. 1830, Neues Jahrb. Min., 30.
Woodward, A. S. 1895 A, 158.
Zittel, K. A. 1890 A, 207.

Tetragonolepis? sp. indet.

Hay, O. P. 1902 A, 376 (Semionotus ovatus, in part).
Egerton, P. G. in Lyell, C. 1847 B, 277, pl. ix, fig. 2.
Newberry, J. S. 1888 A, 20 (This genus?).
Shaler and Woodworth 1899 A, 431 ("Tetragonolepis").
Triassic (Newark); Virginia.

ASPIDORHYNCHIDÆ Nicholson and Lydekker.

Nicholson and Lydekker 1889 A, 987.
Arldt, T. 1923 A, 494 ("aspidorhynchiden").
Assmann, P. 1906 A, 51, 76 (Rhynchodontidæ).
Bridge, T. W. 1904 A, 502.
Dean, Grudger, Henn 1923 A, 624.
Goodrich, E. S. 1909 A, 344.
Jordan, D. S. 1905 A, ii, 29.
1923 A, 115.
Nicholson and Lydekker 1889 A, 987 (Aspidorhynchidæ, Belonorhynchidæ).
Regan, C. T. 1909 B, 77 (Aspidorhynchii).
Reis, O. 1887 A, 155 ("aspidorhynchen").
Schlosser, M. 1917 A, 138, 139, 140, 148 ("aspidorhynchiden").
Stensiö, E. A. 1925 A, 14, 119 ("aspidorhynchids").
Vetter, B. 1881 A, 73 (Aspidorhynchi).
Woodward, A. S. 1895 A, 415.
1898 B, 111.
1912 A (1908), 142.
Zittel, K. A. 1890 A, 219 (Rhynchodontidæ).
Zittel and Broili 1911 A, 111.
Zittel, Eastman, etc. 1902 A, 88.
Zittel and Koken 1911 A, 111.
Zittel and Schlosser 1923 A, 112.

Belonostomus Agassiz. Type *B. tenuirostris* Agassiz.

Agassiz, L. 1834, Neues Jahrb. Min., 388.
1843 (1844), II, pt. 2, 140, 297.
Arldt, T. 1923 A, 494.
Assmann, P. 1906 A, 56.
Bridge, T. W. 1904 A, 502.
Costa, O. G. 1856, Ittiol. Foss., 13 (Ophirachis).
Dean, Gudger, Henn 1923 A, 624.
Eastman, C. R. 1917 A, 286.
Jordan, D. S. 1905 A, ii, 29.
1919 B, 180.
Nicholson and Lydekker 1889 A, 988.
Reis, O. 1887 A, 151, pls. i, ii.
Schlosser, M. 1917 A, 140.
Steinmann, G. 1927 A, 75.
Stromer, E. 1925 B, 349.
Vetter, B. 1881 A, 84-90.
Winckler, T. C. 1871 B, 173.
Woodward, A. S. 1888 K, 354.
1888 L, 145, pl. vii, figs. 7-13.
1895 A, 428.
1895 G, 210.
1896 E, 70.
1898 B, 112.
1912 A (1908), 142.
Zittel, K. A. 1890 A, 221.
Zittel and Eastman, etc. 1902 A, 89.
Zittel and Koken 1911 A, 112.
Zittel and Schlosser 1923 A, 113.

Belonostomus ornatus Felix.

Felix, J. 1891 A, 192, pl. xxviii, figs. 14-18; pl. xxx, figs. 8, 8*a*.
Woodward, A. S. 1895 A, 440.
Lower Cretaceous (Neocomian); Mexico.

LEPISOSTEIDÆ Adams.

Adams, A. 1854 A, 93.
Unless otherwise indicated the authors, as cited, employ the form Lepidosteidæ.
Hay, O. P. 1902 A, 376 (Lepisosteidæ).
Abel, O. 1919 A, 215.
Agassiz, L. 1832 A, 140 (Lepidostei).
1833 A, 475 (Sauroides).
Allis, E. P. 1909 A, 202.
Arldt, T. 1907 D, 662.
1912 A, 716, 762.
1923 A, 494 ("lepidosteiden").
Baird, S. F. 1876 A, 311 ("garfishes").
Bonaparte, C. L. 1840 A, 48.
Bridge, T. W. 1896 A, 540.
1904 A, 502.
Carus, V. 1875 A, 590 (Lepidosteini).
Cockerell, T. D. A. 1913 B, 121.
Collinge, W. E. 1894 A, 528.
Cunningham, J. T. 1912 A, 246.
Cuvier, G. 1825 A, v, 2, 307 ("lepisostées").
Dean, Gudger, Henn 1923 A, 624.

Duméril, A. M. C. 1870 A, 291 ("lepidostéidés").
Fitzinger, L. J. 1873 A, 52 (Lepidostei).
Fowler, H. W. 1911 A, 149 (Lepisosteidæ).
Gill, T. 1875 B, 252.
1885 B, 27.
Goodrich, E. S. 1908 A, 769.
1913 A, 80.
1909 A, 344 (Lepidosteus).
Gregory, W. K. 1923 A, 238, 240.
Hoernes, R. 1886 A, 556.
Huxley, T. H. 1862 A, liii.
Jaekel, O. 1911 A, 69 (Lepidostei).
Jordan, D. S. 1905 A, ii, 29, 578 (Lepisosteidæ).
1907 B, 259, 761 (Lepisosteidæ).
1923 A, 115 (Lepisosteidæ).
Jordan and Gilbert 1882 A, 89 (Lepidosteidæ).
Lemoine, V. 1889 A, 233 ("lépidostés").
Leunis and Ludwig 1883 A, 774.
Lönnberg, E. 1901 A.
Lütken, C. 1868 C.
1871 A, 286 ("lépidostéides").
Müller, J. 1846 A, 208 (Lepidosteini).
Rabl, C. 1901 A, 489 ("lepidosteiden").
Rauther, M. 1913 A, 1100.
Sauvage, H. E. 1897 A, 92 ("lépidostéidés").
Schlosser, M. 1917 A, 144 ("lepidosteiden").
Sewertzoff, A. N. 1923 B.
Shepherd, C. E. 1914 A, 262.
Terra, P. 1911 A, 205.
Wallace, A. R. 1876 A, ii, 459.
Watson, D. M. S. 1925 A, 866, 867 ("lepidosteoids").
Woodward, A. S. 1898 B, 112.
Zittel and Koken 1911 A, 112.
Zittel and Schlosser 1923 A, 113 (Lepidosteidæ).
Zittel and Woodward 1902 A, 89.

LEPISOSTEUS Lacépéde. Type *L. gavialis* Lacépéde=*Esox osseus* Linn.

Unless otherwise indicated the authors, as quoted, employ the name *Lepidosteus*.
Hay, O. P. 1902 A, 376 (Lepisosteus).
Abel, O. 1912 F, 429, 513.
1919 A, 43, 216, figs. 17, 25.
1920 A, 337, figs. 535, 536.
Adams, L. A. 1919 A, 71, pl. ii.
Agassiz, A. 1877 A, 117, fig. 1.
Agassiz, L. 1832 A, 140.
1835 D, 189.
1835 E, 199.
1835 F, 253.
1835 J, 119.
1844 C, 268.
1856 C, 63.
Allis, E. P. 1897 A, 10.
1898 A, 430.
1898 B, 93.
1905 A, 407.
1909 A, 214.
1915 A, 566.
1918 A, 242.
1918 B, 260.
1919 A, 368.
1919 C, 245.
1919 E, 369.
1922 B.
1922 C, 11.
1923 A, 41, 44.
1926 A, 169.
Arldt, T. 1907 D, 97, 284 (Lepisosteus).
1923 A, 494 (Lepidosteus, Clastes, Pneumatosteus).
Assmann, P. 1906 A, 78.
Baird, S. F. 1876 A, 347.
Baraldi, G. 1877 A, 12.
Baudelot, E. 1873 A, 94, 122.
Baur, G. 1893 D, 117.
Beer, G. R. 1926 A, 283, figs. 111, 115, 120.
Bliss, R. 1875 A, 386.
Boas, J. E. V. 1914 B, 543.
Brandt, J. F. 1865 A, 7.
Bridge, T. W. 1878 A, 688.
1896 A, 540, pl. xxi.
1904 A, 503, 744.
Bronn, H. G. 1848 A, 632, 634.
Cockerell, T. D. A. 1913 B, 121 (Lepisosteus).
Collinge, W. E. 1893 B, 259.
1893 C, 263.
1895 C, 888.
Connell, A. 1835 B, 191.
Cope, E. D. 1880 U, 148 (Clastes).
Coulon, L. 1903 A, 143.
Credner, H. 1893 A, 669.
Cunningham, J. T. 1912 A, 236, 258, pl. xx.
Cuvier, G. 1815 A, 117 ("lépisostées").
Day, H. 1915 A, 431.
Dean, B. 1895 C, 734.
1896 D, 338.
Dean, Gudger, Henn 1923 A, 687.
Deecke, W. 1913 A, 71.
Derjugin, K. M. 1909 A.
1910 A, 629.
Dollo, L. 1892 D, 120.
1893 E, 193.
Duméril, A. M. C. 1856 A, 434 ("lépisostée).
1870 A, 291; pls. xxi, xxii, xxiv (Lepisosteus).
Eastman, C. R. 1911 A, 18.
1917 A, 282.
Edgeworth, F. H. 1925 A, 234, 240 (Lepidosteus).
1926 A, 181, fig. 18 (Lepidosteus).
Egerton, P. G. 1852 C, 6L, 2.
Fowler, H. W. 1911 A, 150 (Lepisosteus).
Gadow, H. 1896 A, 7.
Gaupp, E. 1902 A, 218.
1905 D, 900.
1906 B.
1908 C, 704.
1910 C, 338.
1912 B, 227.
Gegenbaur, C. 1867 A, 56.
1867 B, 358-420, pls. vii-ix.
Gilmore, C. W. 1917 B, 4 (Lepisosteus).
Goetsch, W. 1920 A, 13, 17, 515.
Goodrich, E. S. 1904 A, 477, fig. 2.
1908 A, 757, 758.
1909 A, 512, figs.
1913 A, 81.
Green, J. 1858 A, 363.
Gregory, W. K. 1915 D, 327.

Gregory, W. K. 1920 A, 222.
1922 A, 9, 79.
Hague, F. 1924 A, 274.
Hase, A. 1907 A.
Hasse, C. 1893 C, 94, pl. vi, fig. 13.
Hasse and Schwarck 1870 A, 30.
Hatschek, B. 1889 B, 115, fig. 3.
Heckel, J. J. 1850 A, 365.
1850 B, 145.
1851 A, 222.
Heilprin, A. 1887 A, 68.
Hertwig, O. 1879 A, lxxx.
Hilgard, T. C. 1860 A, 679 ("gars").
Hubbs, C. L. 1919 B, 63.
Huxley, T. H. 1858 D, 517.
1859 H, 45.
1862 A, xlix.
1863 F, 427.
1883 B, 569.
Imms, A. D. 1904 A, 30.
Jordan, D. S. 1905 A, ii, 23, 578 (Lepisosteus).
1907 B, 260 (Lepisosteus).
Jordan and Evermann 1917 A, 66 (Lepisosteus).
Jordan and Gilbert 1882 A, 90 (Lepidosteus).
Kehrer, F. A. 1896 A, 350.
Kesteven, H. L. 1922 A, 312.
Kiaer, J. 1924 A, 95.
Kindred, J. E. 1919 A.
Kingsley, J. S. 1925 A, 33, 103, 104, figs. 36, 111, 112.
Klaatsch, H. 1890 A, 124, 125, pl. vii.
1893 C, 181.
Kner, R. 1860 B, 819.
Köstlin, O. 1844 A.
Kryzanovsky, S. 1916 A, 237.
Lakjer, T. 1927 A.
Lavocat, A. 1885 A, 32 ("lépidostée").
Lebedinsky, N. G. 1917 A, 315 (Lepidosteus).
Lee, J. E. 1860 A, 458, pl. xii.
Leriche, M. 1900 A, 187.
1902 A, 12.
1906 C, 417.
Leunis and Ludwig 1883 A, 774.
Lönnberg, E. 1901 A.
1902 A.
Lucas, F. A. 1901 J, 57 ("gar pike").
Luther, A. 1913 B, 13, 26, 58.
Lütken, C. 1868 C.
Mantell, G. A. 1844 A, 651.
Matthes, E. 1921 A, 221.
Matthew, W. D. 1915 A, 298.
Mayhew, R. L. 1924 A, 315.
Meek, A. 1916 A, 52.
Miall, L. C. 1872 A, 25, 31.
Müller, J. 1845 A.
Nopcsa, F. 1923 C, 474.
Norman, E. W. 1926 A.
Osburn, R. C. 1906 B, 587.
Owen, R. 1848 B, 49.
1868 A, 888.
Peale, A. C. 1876 A, 154 (Clastes).
Pehrson, T. 1922 A.
Plate, L. 1926 A, 44.
Pompeckj, J. F. 1913 A, 1145.
Priem, F. 1901 A, 490 (Lepidosteus); 491 (Clastes).
1908 B, 81, 90.
Rauther, M. 1913 A, 1071, fig. 26.
Regan, C. T. 1923 B, 445, 455.
Reis, O. 1887 A, 151 (Lepidosteus).
Reynolds, S. H. 1897 A, 545.
Ridewood, W. G. 1896 A, 381.
1904 A, 56.
1905 C, 279.
Rogers, A. F. 1924 A, 546.
Romer, A. S. 1924 A, 123, 128, figs. 2, 3, 6, 7, 9.
Rosén, N. 1916 A, 21, fig. 10.
Ryder, J. 1885 E, 95.
Sagemehl, M. 1883 A.
1884 A, 19.
Salensky, W. 1899 B, 317.
Sauvage, H. E. 1897 A, 92 (Lepidosteus, Clastes).
Scharff, R. F. 1911 A, 163, 198, 290.
1922 A, 68.
Schauinsland, H. 1906 A, 438, 449, figs. 251-254.
Schlesinger, G. 1909 A (144).
Schlosser, M. 1901 N, 480.
1917 A, 142.
Schmalhausen, J. J. 1912 A, 539, 568, pls. xvi-xviii.
1913 A, 3.
1913 C, pls. ii, iii.
1923 B, 546, fig. 1.
Schreiner, K. E. 1902 A, 467 (Lepisosteus).
Scupin, H. 1896 A, 166.
Sewertzoff, A. 1896 A, 239, fig. 2.
1918 A, 207.
1923 B.
1924 A, 578.
1925 A, 274.
1926 A, 523.
1926 D, 77.
1926 E, 555.
Solger, B. 1880 A, 368.
Stadtmüller, F. 1926 A, 160, fig. 6.
Stanton and Hatcher 1905 A, 38 (Lepidotus).
Starks, E. C. 1916 A, 12.
Steinmann, G. 1912 B, 726.
Stensiö, E. A. 1921 A, 138, 275.
1925 A, 14, 24, 31.
1925 B, 106.
Stephan, P. 1900 A, 287.
Strecker, C. 1887 A, 302.
Stromer, E. 1925 B, 360 (Lepidosteus).
Sushkin, P. P. 1910 A, 252.
1927 A, 264.
Sutton, J. B. 1884 A, 570.
Taylor, H. F. 1916 A, 298.
Terra, P. 1911 A, 96, fig. 24.
Tims, H. W. 1905 A, 45.
Tomes, C. S. 1877 A, 46.
1878 A, 38, pl. iv.
1898 C, 347.
Traquair, R. H. 1880 A, 157.
1900 C, 508.
Uhlmann, E. 1921 A, 302.
Ussow, S. 1900 A.
Van Wijhe, J. W. 1922 A, 293 (Lepidosteus)
Veit, O. 1911 A.
Wagner, R. 1843 A.
Wallace, A. R. 1876 A, ii, 459.
Wamich, P. 1913 A, 21.
Watson, D. M. S. 1912 A, 5.
1925 A, 851.

White, C. A. 1885 A, 64.
Wiedersheim, R. 1880 C, 128.
Wilder, B. 1843 B, 131.
1876 A, 153, 166, pl. i.
Woodward, A. S. 1898 B, 113.
Woodward, H. 1878 A, 19.
1906 C, 279.
Wyman, J. 1843 B, 131.
Zittel and Schlosser 1923 A, 113, figs. 7, 196.
Zittel and Koken 1911 A, 113, figs. 6, 208.
Zittel and Woodward 1902 A, 89.

Lepisosteus aganus (Cope).

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Merrill, G. P. 1907 A, 7 (Clastes).
Stromer, E. 1925 B, 361.
Eocene (Wasatch); New Mexico.

Lepisosteus atrox Leidy.

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Hussakof, L. 1908 A, 78.
Hussakof and Bryant 1919 A, 195.
Jordan, D. S. 1905 A, ii, 32.
Merrill, G. P. 1907 A, 7 (Clastes anax, atrox); 12 (L. atrox).
Sauvage, H. E. 1901 G, 80 (Lepidosteus).
Schlosser, M. 1901 N, 480 (Lepidosteus).
Stromer, E. 1925 B, 360.
Eocene (Bridger); Wyoming.

Lepisosteus cuneatus (Cope).

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1909 B, 796.
Hussakof, L. 1908 A, 78.
Hussakof and Bryant 1919 A, 195.
Stromer, E. 1925 B, 360.
Eocene (Manti); Utah.

Lepisosteus cycliferus (Cope).

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Merrill, G. P. 1907 A, 8 (Clastes).
Eocene (Wasatch); Wyoming.

Lepisosteus glaber Marsh.

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Cope, E. D. 1874 B, 441.
Eocene (Bridger); Wyoming.

Lepisosteus integer (Cope).

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Loomis, F. B. 1907 B, 358 (Lepidosteus).
Merrill, G. P. 1907 A, 8 (Clastes).
Stromer, E. 1925 B, 361 (Lepidosteus).
Eocene (Wasatch); New Mexico.

Lepisosteus knieskerni Fowler.

Fowler, H. W. 1911 A, 150, fig. 92. Cretaceous??; New Jersey.

Lepisosteus longus Lambe.

Lambe, L. M. 1908 A, 9, 13, pl. i, figs. 7-9 (Lepidosteus). Oligocene (Cypress Hills); Saskatchewan.

Lepisosteus nahunticus (Cope).

Hay, O. P. 1902 A, 377.
Hussakof, L. 1908 A, 79, fig. 41.
Miocene; North Carolina.

Lepisosteus notabilis Leidy.

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 A, 163 (Lepidosteus).
Leidy, J. 1873 B, 192, 349, pl. xxxii, figs. 12, 13.
Eocene (Bridger); Wyoming.

Lepisosteus occidentalis Leidy.

Hay, O. P. 1902 A, 377.
Bowen, C. F. 1915 A, 118, 148-151 (L. occidentalis, L. Haydeni).
Brown, B. 1907 A, 842.
1914 E, 358, 378.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus occidentalis, L. haydeni).
Cross, W. 1896 A, 227.
Gilmore, C. W. 1924 D, 27.
Hatcher, J. B. 1905 B, 67 (Lepidotus occidentalis); 68 (Lepidotus haydeni).
Hay, O. P. 1903 D, 119.
1910 B, 296.
Lambe, L. M. 1902 A, 29, pl. xix, fig. 3.
1904 C, 21, 36, 43 (Lepidosteus).
1907 B, 179 (Lepidotus).
Matthew, W. D. 1916 A, 485.
Osborn, H. F. 1902 I, 11 (Lepidotus).
Peale, A. C. 1912 A, 746, 754 (Lepidotus).
Sternberg, C. M. 1924 A, 68 (Lepisosteus).
Stromer, E. 1925 B, 360.
Williston, S. W. 1902 K, 953.
Cretaceous (Judith River); Montana: (Hell Creek); Montana: (Belly River); Alberta: (Lance); Wyoming, Saskatchewan: (Arapahoe or Denver); Colorado.

Lepisosteus osseus (Linn.).

Unless otherwise indicated, the authors, as cited, spell this name *Lepidosteus*.
Hay, O. P. 1902 A, 377 (Lepisosteus).
Abel, O. 1912 F, 429, fig. 305.
1919 A, 52, fig. 25.
Agassiz, L. 1835 B, 338.
Allis, E. P. 1919 C, 249.
Beer, G. R. 1926 A, 284, figs. 25-33.
Cockerell, T. D. A. 1908 C, 163.
Collinge, W. E. 1893 C, 263, pls. iv-ix.
Cuvier, G. 1814 A, 76 (Esox).
Goetsch, W. 1920 A, 14, 516, pl. i (Lepisosteus).
Goodrich, E. S. 1901 A, 319, fig. 1.
1909 A, 512, figs.
Hay, O. P. 1923 A, 363, 366 (Lepisosteus).
Hertwig, O. 1874 B, pl. i, figs. 1, 2 (Lepisosteus).
Jackson, C. T. 1854 B, 92 ("gar-pike").
Jordan and Evermann 1896 A, 109 (Lepisosteus).
Jordan and Gilbert 1882 A, 91.
Klaatsch, H. 1890 A, 125, 200, pl. vii.
Köstlin, O. 1844 A, 332 (Lepisosteus).
Luther, A. 1913 B, 27, pl. i, text-figs. 12, 13, 28 (Lepisosteus).
Mayhew, R. L. 1924 A, 315.
Norman, E. W. 1926 A, 437, fig. 50.

Regan, C. T. 1923 B, 445 (Lepisosteus).
Scupin, H. 1896 A, 166 (Lepisosteus).
Sewertzoff, A. N. 1925 A, 273, fig. 3.
1926 D, 78, fig. 1.
Shepherd, C. E. 1910 B, 296, pl. ii, fig. 6.
1914 A, 262.
Stephan, P. 1900 A, 355, fig. 3 (Lepisosteus).
Veit, O. 1907 A, 157, figs. 1-12.
1911 A, 93-225, pls. A-C.
Recent; Mississippi Valley: Pleistocene; South Carolina.

Lepisosteus platostomus Rafinesque.

Rafinesque, C. S. 1820, Icth. Ohiensis, 72.
Hay, O. P. 1917 E, 43.
1923 A, 382.
Jordan and Evermann 1896 A, 110.
Mayhew, R. L. 1924 A, 315, pls. i-iv (Lepidosteus).
Parker and Haswell 1897 A, 203, fig. 826.
Regan, C. T. 1923 B, 445, figs. 2-5 (Lepidosteus).
Recent; Great Lakes to the Gulf and southwestern Texas: Pleistocene (Middle?); Florida.

Lepisosteus simplex Leidy.

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
1909 B, 796.
Hussakof and Bryant 1919 A, 195, pl. lxviii.
Merrill, G. P. 1907 A, 12.
Sauvage, H. E. 1901 G, 81 (Lepidosteus).
Schlosser, M. 1901 N, 480 (Lepidosteus).
Stromer, E. 1925 B, 360.
Eocene (Bridger); Wyoming.

Lepisosteus whitneyi Marsh.

Hay, O. P. 1902 A, 377.
Cockerell, T. D. A. 1908 C, 163 (Lepidosteus).
Eocene (Bridger); Wyoming.

Lepisosteus sp. indet.

Gidley, J. W. 1915 E, 539 (This genus?). Upper Cretaceous (Fort Union); Montana.
1927 E, 274. Pleistocene; Florida.
Gilmore, C. W. 1916 D, 302, pl. lxxvii, fig. 5. Upper Cretaceous; New Mexico.
1920 A, 8, 68. Upper Cretaceous (Kirtland); New Mexico.
1926 J, 28. Upper Cretaceous (Lance); Wyoming.
Hay, O. P. 1903 D, 120.
1927 D, 274. Pleistocene; Florida.
Merrill, G. P. 1907 A, 7 (Clastes); 12 (Lepisosteus).
Reeside, J. B. 1924 A, 21. Upper Cretaceous (Fruitland); 23 (McDermott); p. 31 (Ojo Alama); 38, 42 (Nacimiento); New Mexico.
Sinclair and Granger 1914 A, 303. Eocene; New Mexico.

Atractosteus Rafinesque. Type *Lepisosteus (A.) ferox Raf.* (= *A. tristœchus*).

Rafinesque, C. S. 1820, Ichth. Ohien., 75.
Gregory, W. K. 1920 A, 112, fig. 4 (Lepidosteus).
Jordan and Evermann 1896 A, 109, 111.
Regan, C. T. 1923 B, 445, fig. 1 (Lepidosteus).

Atractosteus emmonsi sp. nov.

Emmons, E. 1858 B, 244, fig. 98 ("ganoid").
Miocene?; North Carolina.

Atractosteus lapidosus Hay.

Hay, O. P. 1919 C, 110-111, pl. xxvi, fig. 4; pl. xxviii, fig. 8.
Hay, O. P. 1923 A, 375.
Pleistocene; Florida.

Atractosteus tristœchus (Bloch and Schneider).

Bloch and Schneider 1801, Syst. Ichth., 395 (Esox).
Girard, C. F. 1858 Pacif. R. R. Explor., 353 [Lepidosteus (Atractosteus) berlandieri].
Günther, A. C. 1870 A, 329 (Lepidosteus viridis).
Hay, O. P. 1926 C, 1 (This species?).
Jordan and Evermann 1896 A, 111 (Lepisosteus).
1900 A, 3235, pl. xxii, fig. 50 (Lepisosteus).
Jordan and Gilbert 1882 A, 92 (Litholepis).
Rafinesque, C. S. 1820, Ichth. Ohien., 73 [Lepisosteus (Atractosteus) ferox].
Recent; Southern States, Cuba, Mexico: Pleistocene (Early); Texas.

Suborder Amiiformes, new name.

Hay, O. P. 1902 A, 378 (Halecomorphi).
Allis, E. P. 1909 A, 201 (Halecomorphi).
Arldt, T. 1907 D, 282 (Cyclolepidoti).
Beer, G. R. 1926 A, 289 (Halecomorphi).
Cockerell, T. D. A. 1913 B, 122 (Halecomorphi).
Cope, E. D. 1871 T, 452, 453 (Halecomorphi).
1891 N, 22 (Halecomorphi).
Coulon, L. 1903 A, 149 ("amioides").
Eastman, C. R. 1908 A, 63 (Protospondyli).
1904 A, 494 (Protospondyli).
1909 A, 327 (Amioidei).
Goodrich, E. S. 1913 A, 80 (Amioidei).
Gorjanovič-Kramberger, K. 1905 A, 195 (Protospondyli).
Gregory, W. K. 1907 D, 448, 466 (Halecomorphi).
1923 A, 238, 240 (Amioidea).
Huxley, T. H. 1861 D, 442, 448 (Amiadæ).
Jaekel, O. 1911 A, 84 (Amii).
Jordan, D. S. 1905 A, ii, 33, 574 (Halecomorphi).
1907 B, 261, 761 (Halecomorphi).
1923 A, 115 (Halecomorphi).
Jordan and Gilbert 1882 A, 92 (Halecomorphi).
Kingsley, J. S. 1885 A, 97 (Halecomorphi).
Oswald, F. 1909 A, 126 (Amioidea).
Pompeckj, J. F. 1913 A, 1144 (Amioidei).
Regan, C. T. 1909 B, 76 (Amioidei, Pachycormoidei).

Schlosser, M. 1917 A, 136, 148 (Halecomorphi).
Stromer, E. 1912 A, 31 (Amioidei).
1925 B, 361, 365 (Amioidei).
Zittel and Koken 1911 A, 113 (Amioidei).
Zittel and Schlosser 1923 A, 113 (Amioidei).
Zittel and Woodward 1902 A, 89 (Amioidei)

FURIDÆ Jordan.

Jordan, D. S. 1923 A, 116.
Unless otherwise indicated, the authors, as cited, use for this family the name Eugnathidæ.
Hay, O. P. 1902 A, 378 (Isopholidæ).
Arldt, T. 1923 A, 495.
Boulenger, G. A. 1904 D, 498.
Bridge, T. W. 1904 A, 498.
Cunningham, J. T. 1912 A, 258.
Eastman, C. R. 1905 B, 100.
1911 A, 29, 73.
Goodrich, E. S. 1904 A, 495.
Goodrich, E. S. 1909 A, 390.
Gregory, W. K. 1923 A, 238.
Jordan, D. S. 1905 A, ii, 26 (Isopholidæ).
Pompeckj, J. F. 1913 A, 1144.
Priem, F. 1908 B, 15 ("eugnathidés").
Regan, C. T. 1923 B, 457, 460.
Stolley, E. 1920 A, 77.
Swinnerton, H. H. 1925 A, 98 (Eugnathidæ).
Woodward, A. S. 1906 C, 279 (Eugnathus).
Zittel and Koken 1911 A, 114 (Caturidæ).
Zittel and Schlosser 1923 A, 116 (Caturidæ).
Zittel and Woodward 1902 A, 83.

OTOMITLA Felix. Type *O. speciosa* Felix.

Felix, J. 1891 A, 189.
Woodward, A. S. 1896 E, 70.
1898 B, 108.

Otomitla speciosa Felix.

Felix, J. 1891 A, 189, pl. xxix, fig. 3; pl. xxx, figs. 3-5.
Woodward, A. S. 1895 A, 358.
Cretaceous (Neocomian); Mexico.

PTYCHOLEPIS Agassiz. Type *P. bollensis* Agassiz.

Agassiz, L. 1832 A, 142.
Hay, O. P. 1902 A, 378.
Agassiz, L. 1832 A, 142.
1833 A, 476.
1835 H, 219.
Alessandri, G. 1910 A, 123.
Bronn, H. G. 1849 A, 663.
Deecke, W. 1913 A, 74.
1926 A, 193.
Eastman, C. R. 1905 B, 100.
1911 A, 21, 29, 73.
Egerton, P. G. 1852 C, 6 H, i, pl. vii.
1855 A, 8 I, i, pl. viii.
Hennig, E. 1919 B, 173, pl. iii, text-fig.
Jordan and Evermann 1917 A, 140.
Koken, E. 1893 B, 278.
Priem, F. 1908 B, 16.
Scupin, H. 1896 A, 169, pl. x, fig. 5.
Zittel and Koken 1911 A, 116.
Zittel and Schlosser 1923 A, 118.
Zittel and Woodward 1902 A, 84.

Ptycholepis marshi Newberry.

Newberry, J. S. 1878 B, 127.
Hay, O. P. 1902 A, 378 (P. marshii).
Eastman, C. R. 1905 B, 100.
1911 A, 29, 73, pls. vii, viii.
Hussakof, L. 1908 A, 95, pl. vi.
Loper, S. W. 1899 A, 98 (P. marshii).
Lull, R. S. 1917 D, 110.
Lyman, B. S. 1894 A, 209 (P. marshii).
Moodie, R. L. 1918 B, 390.
1923 B, 329.
Triassic (Newark); Connecticut.

MACROSEMIIDÆ Cope.

Hay, O. P. 1902 A, 378.
Abel, O. 1919 A, 204.
Arldt, T. 1923 A, 495 ("macrosemiden").
Goodrich, E. S. 1904 A, 495.
1908 A, 769.
1909 A, 336.
Gregory, W. K. 1907 D, 448.
1923 A, 238, 240.
Jordan, D. S. 1905 A, ii, 26, 580.
1907 B, 761.
1923 A, 115.
Regan, C. T. 1923 B, 455, 460.
Schlosser, M. 1917 A, 138, 140, 147 ("macrosemiiden").
Steinmann, G. 1927 A, 75 (Macrosemidæ).
Traquair, R. H. 1911 A, 29.
Watson, D. M. S. 1925 A, 866 ("macrosemiids").
Woodward, A. S. 1906 C, 279.
Zittel and Koken 1911 A, 109.
Zittel and Schlosser 1923 A, 110.
Zittel and Woodward 1902 A, 84.

MACREPISTIUS Cope. Type *M. arenatus* Cope.

Hay, O. P. 1902 A, 378.
Zittel and Woodward 1902 A, 84.

Macrepistius arenatus Cope.

Hay, O. P. 1902 A, 378.
Hill, R. T. 1901 A, 159, pl. xxiv.
Hussakof, L. 1908 A, 81.
Jordan, D. S. 1905 A, ii, 26.
Lower Cretaceous (Glen Rose); Texas.

PACHYCORMIDÆ Woodward.

Hay, O. P. 1902 A, 378.
Arldt, T. 1923 A, 495 ("pachycormiden").
Bridge, T. W. 1904 A, 501.
Dean, Gudger, Henn 1923 A, 624.
Dollo, L. 1892 F, 182 (Protosphyraenidæ).
Goodrich, E. S. 1908 A, 769.
1909 A, 331.
Gregory, W. K. 1923 A, 238.
Gudger, E. W. 1918 A, 100 (Protosphyrænidæ).
Hennig, E. 1920 B, 113.
Jordan, D. S. 1905 A, ii, 34 (Pachycormidæ Protosphyrænidæ).
1907 B, 761 (Pachycormidæ, Protosphyrænidæ).
Jordan, D. S. 1923 A, 115.
Regan, C. T. 1923 B, 445.
Schlosser, M. 1917 A, 136, 138 ("pachycormiden"); 142 ("protosphyræniden").
Steinmann, G. 1927 A, 77.
Stromer, E. 1925 B, 361 (Protosphyrænidæ).
Woodward, A. S. 1898 B, 109.
1922 C, 93.
Zittel and Koken 1911 A, 113.
Zittel and Schlosser 1923 A, 114 (Pachycormidæ); 115 (Protosphyrænidæ).
Zittel and Woodward 1902 A, 90.

PROTOSPHYRÆNA Leidy. Type *P. ferox* Leidy.

Hay, O. P. 1902 A, 379.
Andreae, A. 1901 A, 308.
1904 A, 309.
Arldt, T. 1923 A, 495 (Protosphyræna); 510 (Pelecopterus).
Bayer, F. 1908 A, 3 (Erisichte).
1909 A, 103.
Cockerell, T. D. A. 1919 A, 172.
Cope, E. D. 1880 U, 146 (Erisichthe).
Dean, Gudger, Henn 1923 A, 624.
Dollo, L. 1892 F, 182.
Eastman, C. R. 1901 B, 111.
1917 A, 298.
Fossa-Mancini, E. 1921 A, 196 (Pelecopterus).
Gregory, W. K. 1923 A, 241.
Gudger, E. W. 1918 A, 100.
Hay, O. P. 1902 F, 470.
1903 A, 2, 13, text-fig. 6.
Hennig, E. 1912 A, 489.
Jordan, D. S. 1905 A, ii, 34.
Lydekker, R. 1910 F, 673.
McClung, C. E. 1908 B, 244, pl. xiii; text-figs. 9, 10.
Mudge, B. F. 1875 A, 122 ("new genus").
Pompeckj, J. F. 1913 A, 1144.
Priem, F. 1896 B, 18.
1908 B, 49, fig. 19.
Rogers, A. F. 1924 A, 545.
Schlosser, M. 1917 A, 140, 141.
Sternberg, C. H. 1907 C, 123.
1917 A, 177 ("snout fish").
Storms, R. 1891 A, 154.
Stromer, E. 1924 B, 349, 361.
Woodward, A. S. 1895 G, 211, pl. viii and text-figs. 1-4.
1912 A (1908), 145.
1912 C, 329, pl. xix.
Zittel and Koken 1911 A, 130.
Zittel and Schlosser 1923 A, 116, fig. 202.
Zittel and Woodward 1902 A, 91.

Protosphyræna angulata Cope.

Hay, O. P. 1902 A, 379.
Hussakof, L. 1908 A, 92, fig. 47 (This genus?).
Cretaceous; North Carolina.

Protosphyræna bentoniana Stewart.

Hay, O. P. 1902 A, 379.
Cockerell, T. D. A. 1919 A, 171.
Upper Cretaceous (Benton); Kansas.

Protosphyræna chirurgus (Cope).

Hay, O. P. 1902 A, 379.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna dimidiata (Cope).

Hay, O. P. 1902 A, 379.
1903 A, 16, text-figs. 8-10, 11?, 12?.
Hussakof, L. 1908 A, 92.
Cretaceous (Niobrara); Kansas.

Protosphyræna gigas Stewart.

Hay, O. P. 1902 A, 379.
Schlosser, M. 1901 L, 479.
Upper Cretaceous (Pierre); Kansas.

Protosphyræna gladius (Cope).

Hay, O. P. 1902 A, 379.
1903 A, 24.
Hussakof, L. 1908 A, 93.
Cretaceous (Niobrara); Kansas.

Protosphyræna nitida (Cope).

Hay, O. P. 1902 A, 379.
Bayer, F. 1909 A, 103.
Gudger, E. W. 1918 A, 100, pl. vii, fig. 25.
Hay, O. P. 1903 A, 3, text-figs. 1-3.
Hussakof, L. 1908 A, 93, fig. 48b.
Zittel and Schlosser 1923 A, 115, fig. 201.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna obliquidens Loomis.

Hay, O. P. 1902 A, 379.
1903 A, 7.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna occidentalis Stewart.

Hay, O. P. 1902 A, 380.
Andreae, A. 1904 A, 309 (Ichthyodectes).
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna penetrans (Cope).

Hay, O. P. 1902 A, 379.
Bayer, F. 1909 A, 103.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna perniciosa (Cope).

Hay, O. P. 1902 A, 379.
1903 A, 9, pl. i, fig. 1; text-figs. 4, 5, 7.
Hussakof, L. 1908 A, 94.
Woodward, A. S. 1912 A, (1908), 146, 150, text-fig. 43.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna recurvirostris Stewart.

Hay, O. P. 1902 A, 379.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna sequax Hay.

Hay, O. P. 1903 A, 20.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna tenuis Loomis.

Hay, O. P. 1902 A, 379.
1903 A, 14, pl. i, figs. 2, 3.
Hussakof, L. 1908 A, 94.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna ziphioides (Cope).

Hay, O. P. 1902 A, 379.
1903 A, 22, text-figs. 13, 14.
Hussakof, L. 1908 A, 95, fig. 48a.
Upper Cretaceous (Niobrara); Kansas.

Protosphyræna sp. indet.

Hill, R. T. 1901 A, 328. Lower Cretaceous (Eagle Ford); Texas.
Hussakof, L. 1908 A, 95. Upper Cretaceous (Niobrara); Kansas.
Sternberg, C. H. 1913 A, 48. Upper Cretaceous (Niobrara); Kansas.

AMIIDÆ Günther.

Günther, A. C. 1870 A, 324.
Hay, O. P. 1902 A, 380.
Abel, O. 1919 A, 212.
Arldt, T. 1907 D, 637.
1912 A, 716, 762.
1923 A, 495 ("amiiden").
Braus, H. 1901 B, 217, 282 ("amiaden").
Bridge, T. W. 1896 A, 537.
1904 A, 499, 730.
Cockerell, T. D. A. 1913 B, 122.
Collinge, W. E. 1894 A, 529.
1895 D, 83.
Cunningham, J. T. 1912 A, 246.
Cuvier, G. F. 1805 A ("amies").
Dean, Gudger, Henn 1923 A, 624, 649.
Duméril, A. 1870 A, 18, 398 ("amiadés").
Fitzinger, L. J. 1873 A, 51 (Amiæ).
Giebel, C. G. 1855 A, 111 (Amiadæ).
Gill, T. 1875 B, 252.
1885 B, 18.
Goodrich, E. S. 1908 A, 769.
1909 A, 333.
Gregory, W. K. 1923 A, 238, 240.
Hoernes, R. 1886 A, 557 (Amiadæ).
Jordan, D. S. 1905 A, ii, pp. 34, 556.
1907 B, 262 (Amiidæ); p. 761 (Amiatidæ).
Jordan, D. S. 1923 A, 116.
Jordan and Gilbert 1882 A, 92.
Kiaer, J. 1924 A, 95, 97, 125 (Amioidei).
Klaatsch, H. 1890 A, 178 ("amiaden").
1893 B, 667 ("amiaden").
Lambe, L. M. 1905 D, 370 A.
Lemoine, V. 1889 A, 233 ("amiadés").
Leriche, M. 1900 A, 183 (Amiadæ).
Leunis and Ludwig 1883 A, 775.
Lönnberg, E. 1901 A (Amiadæ).
Lütken, C. 1871 A, 293 ("amides").
Pompeckj, J. F. 1913 A, 1144.
Rabl, C. 1901 A, 489 ("amiaden").
Rauther, M. 1913 A, 1100.
Regan, C. T. 1923 B, 455.
Schlosser, M. 1917 A, 144 ("amiiden").
Scupin, H. 1896 A, 174, 184 (Amiadæ).
Sewertzoff, A. N. 1923 B.
Shepherd, C. E. 1914 A, 262 (Amidæ).
Stannius, H. 1854 A (Amiæ).
Stromer, E. 1925 B, 361.
Wallace, A. R. 1876 A, ii, 458.
Woodward, A. S. 1902 C, 83 ("amioids").
Zittel and Koken 1911 A, 116 (Megaluridæ).
Zittel and Schlosser 1923 A, 119 (Megaluridæ).
Zittel and Woodward 1902 A, 91.

AMIOPSIS Kner. Type *A. prisca* Kner.

Hay, O. P. 1902 A, 380.
Jordan, D. S. 1905 A, ii, 36.
Sauvage, H. E. 1900 B, 116.

Amiopsis? dartoni Eastman.

Hay, O. P. 1902 A, 380.
Gilmore, C. W. 1905 A, 80.
Hussakof, L. 1916 C, 348.
Sauvage, H. E. 1900 B, 116.
Jurassic (Basal); South Dakota.

AMIA Linnæus. Type *Amia calva* (Linn).

Hay, O. P. 1902 A, 380.
Abel, O. 1919 A, 37, 214, figs. 9, 10.
Adams, L. A. 1919 A, 69, pl. ii.
Allis, E. P. 1897 A, 1.
1898 A.
1898 B, 83.
1903 A, 660.
1903 B.
Allis, E. P. 1905 A, 401.
1907 A, 569.
1909 A, 213.
1914 A, 357.
1915 A.
1918 A, 241.
1918 B, 258.
1919 A, 353.

Allis, E. P. 1919 B, 73.
1919 C, 245.
1919 D, 219.
1919 E, 365, 366, 369.
1922 B.
1922 C, 13.
1923 A, 41, 46.
1923 B, 125, 163.
1925 A, 76.
1926 A, 169.
Arldt, T. 1907 D, 284.
1923 A, 495 (Amia, Protamia, Hypamia).
Baraldi, G. 1877 A, 12.
Beer, G. R. 1924 A, 26, figs. 8-14, 16.
1926 A, 289, 330, figs. 34-49, 107, 113, 131.
Boas, J. E. V. 1914 B, 543.
Braus, H. 1901 B, 217.
Bridge, T. W. 1878 A, 712.
1896 A, 537, pl. xxi.
1904 A, 500, 730.
Cockerell, T. D. A. 1908 A, 574.
1911 B, 865.
1913 B, 121, 122.
Cockrell and Moor 1910 A, 252.
Cunningham, J. T. 1912 A, 258, 309, 321, 495.
Cuvier, G. 1815 A, 109.
Day, H. 1915 A, 431.
Dean, B. 1895 C, 734.
1896 D, 338.
Dean, Gudger, Henn 1923 A, 668 (Amia).
Deecke, W. 1913 A, 71.
Derjugin, K. 1909 A.
1910 A, 629.
Dollo, L. 1893 D, 3.
Duméril, A. 1856 A, 490 ("amie").
1870 A, 398, 416.
Eastman, C. R. 1911 A, 18.
1917 A, 282.
Edgeworth, F. H. 1925 A, 240, figs. 26, 28.
1926 A, 18, figs. 14-17.
Egerton, P. G. 1852 C, 6 L, 2.
Eimer, G. H. T. 1901 A, 61.
Fitzinger, L. J. 1873 A, 51.
Frost, G. A. 1913 A, 221.
Gadow, H. 1896 A, 7, 22.
Gaupp, E. 1898 B, 820.
1901 B, 935.
1905 D, 900.
1906 B.
1911 A, 420.
Gegenbaur, C. 1867 B, 419, pl. viii, fig. 13; pl. ix, fig. 22.
Giebel, C. G. 1855 A, 111.
Goetsch, W. 1915 A, 435.
Goodrich, E. S. 1904 A, 477.
1908 A, 769.
1908 B, 546.
1909 A, 506, figs.
Green, J. 1862 A, 218.
Gregory, W. K. 1915 D, 326, fig. 4.
1922 A, 9.
Haller, B. 1906 A, 255.
Hase, A. 1907 A.
1913 A, 148, fig. 69.
Hasse, C. 1893 C, 94, pl. vi, figs. 14, 15.
Hasse and Schwarck 1870 A, 30.
Hatschek, B. 1889 B, 115.
Hay, O. P. 1897 A, 131.
Heckel, J. J. 1850 A, 365.
1850 B, 145.
1851 A, 219.
Heilprin, A. 1887 A, 68, 301.
Hilgard, T. C. 1860 A, 679.
Hubbs, C. L. 1919 B, 62.
Huxley, T. H. 1861 D, 456.
1863 F, 427.
1876 E, 121.
1883 B, 567, 570, fig. 2.
Hyrtl, C. J. 1862 A, 97.
Jordan, D. S. 1905 A, ii, 35, 556.
1907 B, 262.
1917 A, 23.
Jordan and Evermann 1917 A, 23, 91.
Jordan and Gilbert 1882 A, 94.
Kehrer, F. A. 1896 A, 350.
Kesteven, H. L. 1922 A, 312.
Kindred, J. E. 1919 A.
Kingsley, J. S. 1885 A, 97.
1925 A, 222, figs. 233, 249.
Klaatsch, H. 1890 A, 179.
1893 B, 667.
Kryzanovsky, S. 1916 A, 237.
Lakjer, T. 1927 A, figs. 68, 81, 105.
Leriche, M. 1900 A, 183.
1906 C, 411.
Leunis and Ludwig 1883 A, 775.
Locy, W. A. 1894 A, 179.
Lubosch, W. 1911 B, 741.
Luther, A. 1913 B, 22, 58.
Lütken, C. 1871 A, 293.
McMurrich, J. P. 1883 A, 627.
Matthes, E. 1921 A, 221.
Mayhew, R. L. 1924 A, 317.
Meek, A. 1916 A, 52.
Miall, L. C. 1872 A, 29, 30.
Moodie, R. L. 1908 G, 515, fig. 2.
Newton, E. T. 1899 C, 1, pl. i.
Norman, E. W. 1926 A.
Owen, R. 1866 A, 37, 108.
Parker and Bettany 1877 A, 85.
Pehrson, T. 1922 A, 1-63.
Priem, F. 1900 A, 842.
1901 A, 488, 502.
1908 B, 81, 90, 123, fig. 62.
1911 C, 34, figs. 40-42.
Rafinesque, C. S. 1815 A, 380 (Amiatus).
Regan, C. T. 1912 B, 839.
1923 B, 451, 455.
Reynolds, S. H. 1897 A, 532.
Ridewood, W. G. 1904 A, 56.
1921 A, 329, 335.
Romer, A. S. 1924 A, 123, 128, figs. 2, 3.
Scharff, R. F. 1911 A, 163.
Schauinsland, H. 1906 A, 437.
Schlosser, M. 1917 A, 140, 142.
Schmalhausen, J. J. 1912 A, 526, 560, pls. xv-xviii.
1913 A, 5, 16.
1923 B, 544.
Schreiner, K. E. 1902 A, 467.
Scupin, H. 1896 A, 175, pl. x, fig. 12.
Sewertzoff, A. 1896 A, 240.
1918 A, 207.
1923 B, fig. 3.

Sewertzoff, A. 1925 A, 274.
1926 A.
1926 C, 42.
1926 D, 78, figs. 2, 3.
Shepherd, C. E. 1910 B, 296.
Stadtmüller, F. 1926 A, 161, fig. 7.
Stannius, H. 1854 A.
Starks, E. C. 1904 A, 260.
1916 A, 13 (Amiatus).
Steinmann, G. 1912 B, 726.
Stensiö, E. A. 1921 A, 274.
1922 A, 1265.
1925 A, 22, 31.
1925 B, 106, 162.
Stephan, P. 1900 A, 293.
Swinnerton, H. W. 1905 A, 373.
Totton, A. K. 1914 A, 258.
Traquair, R. H. 1900 C, 508.
Uhlmann, E. 1921 A, 322.
Van Wijhe, J. W. 1922 A, 293.
Watson, D. M. S. 1925 A, 820, 824, 851, 860, 865, 867.
Wegner, R. N. 1922 A, 482, text-fig. 40.
White, C. A. 1885 A, 64.
Whitehouse, R. H. 1910 B, 595.
1910 C, 137.
1918 A, 136.
Wilder, B. 1876 A, 151, 166.
Williston, S. W. 1925 A, 98.
Woodward, A. S. 1902 C, 88.
1906 C, 279.
Zittel and Koken 1911 A, 117.
Zittel and Schlosser 1923 A, 119.
Zittel and Woodward 1902 A, 92.

Amia calva Linnæus.

Linnæus, C. 1766, Syst. Nat., ed. xii, 500.
Allis, E. P. 1897 A, 1.
1898 A, 425, pl. xxxiii.
1898 B, 85.
1905 A, 404.
Baker, F. C. 1920 A, 453.
Beer, G. R. 1924 C, 304, figs. 13-26.
1926 A, 289.
Cockerell, T. D. A. 1908 C, 163.
1910 F, 1.
1911 F, 369.
1913 B, 122, fig. 1.
Creaser, C. W. 1926 A, 18.
Dean, B. 1914 A, 60 ("bowfin").
Degener, L. M. 1924 A, 113, pls. i-viii; text-fig. 1.
Duméril, A. 1870 A, 421.
Franque, H. 1847 A, pl. i.
Gaupp, E. 1901 B, 935, fig. 1.
Goetsch, W. 1915 A, 452, pls. xviii, xix; text-fig. 3.
1920 A, 12, 14, 438, 515, pl. i.
Goodrich, E. S. 1901 A, 318, fig. H.
1904 A, 477.
Hague, F. 1924 A, 267, pls. i-iii.
Hay, O. P. 1912 D, 552 ("bowfin").
1917 E, 43 (Amiatus).
1923 A, 336, 382 (Amiatus).
Heronimus, C. 1911 A, 193, figs. 1-5.
Höfer, B. 1899 A, 106, 118.
Hyrtl, C. J. 1862 A, 97, pl. ii, fig. 3.
Kingsley, J. S. 1885 A, 97.
Meek, A. 1916 A, 52.
Newton, E. T. 1899 C, 4.
Norman, E. W. 1926 A, 409, figs. 43, 48, 50, 54.
Nusbaum, J. 1908 A, 514.
Parker and Haswell 1897 A, 204, fig. 826.
Pehrson, T. 1922 A, 1-63, figs. 1-20.
Priem, F. 1908 B, 81.
Regan, C. T. 1923 B, 451, figs. 6-8.
Romer and Fryxell 1928 A, 519.
Schauinsland, H. 1906 A, 436, figs. 235, 237-240, 242-250.
Schmalhausen, J. J. 1913 C, pls. i-vi.
Sewertzoff, A. N. 1925 A, 273, fig. 2.
1926 A, 531.
Shepherd, C. E. 1914 A, 262.
Stephan, P. 1900 A, 360.
Willey, A. 1920 A, 89.
Woodward, A. S. 1895 A, 369, figs. 37-39.
Zittel and Schlosser 1923 A, 119, figs. 22, 211, 212.
Recent; Great Lakes to Texas and Florida: Pleistocene (Middle?); Florida: (Late); Illinois.

Amia depressa Marsh.

Hay, O. P. 1902 A, 380.
Cockerell, T. D. A. 1908 C, 163.
Romer and Fryxell 1928 A, 526.
Middle Eocene (Bridger); Wyoming.

Amia dictyocephala Cope.

Hay, O. P. 1902 A, 380.
Cockerell, T. D. A. 1906 A, 163.
1908 C, 163.
Hussakof, L. 1906 A, 60, fig. 29.
Merrill, G. P. 1907 A, 6.
Romer and Fryxell 1928 A, 526.
Miocene (Florissant); Colorado.

Amia elegans (Leidy).

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.
Romer and Fryxell 1928 A, 524 (Hypamia).
Middle Eocene (Bridger); Wyoming.

Amia exilis Lambe.

Lambe, L. M. 1908 A, 9, 12, pl. i, figs. 1-6.
Oligocene (Cypress Hills); Saskatchewan.

Amia gracilis Leidy.

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.
Romer and Fryxell 1928 A, 527 (Protamia).
Middle Eocene (Bridger); Wyoming.

Amia macrospondyla Cope.

Hay, O. P. 1902 A, 381.
Lambe, L. M. 1904 C, 27, 38, 43.
1908 A, 9, 12.
Romer and Fryxell 1918 A, 527.
Oligocene (White River); Assiniboia.

Amia media Leidy.

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.

Cope, E. D. 1884 O, 60, pl. iv, figs. 7-20 (Pappichthys).
Merrill, G. P. 1907 A, 6 [Amia (Protamia)]; 14 (Pappichthys).
Romer and Fryxell 1928 A, 527 (Protamia).
Middle Eocene (Bridger); Wyoming.

Amia newberriana Marsh.

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.
Romer and Fryxell 1928 A, 526.
Middle Eocene (Bridger); Wyoming.

Amia scutata Cope.

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.
Merrill, G. P. 1907 A, 6.
Romer and Fryxell 1928 A, 526.
Miocene (Florissant); Colorado.

Amia uintaënsis Leidy.

Hay, O. P. 1902 A, 381.
Cockerell, T. D. A. 1908 C, 163.
Middle Eocene (Bridger); Wyoming.

Amia whiteavesiana Cope.

Hay, O. P. 1902 A, 381.
Lambe, L. M. 1904 C, 27, 38, 43.
1908 A, 9, 12.
Romer and Fryxell 1928 A, 527 (A. whitaecesiana).
Oligocene (White River); Assiniboia.

PAPPICHTHYS Cope. Type *P. plicatus* Cope.

Hay, O. P. 1902 A, 381.
Arldt, T. 1923 A, 495.
Jordan, D. S. 1905 A, ii, 36.
Leriche, M. 1900 A, 185.
Newton, E. T. 1899 C, 1.
Priem, F. 1901 A, 488.
Romer and Fryxell 1928 A, 525 (Syn. of Protamia).
Schlosser, M. 1917 A, 144.
Seeley, H. G. 1886 A, 412.
Stromer, E. 1925 B, 361.
Zittel and Koken 1911 A, 117.
Zittel and Schlosser 1923 A, 120.

Pappichthys corsoni Cope.

Hay, O. P. 1902 A, 381.
Merrill, G. P. 1907 A, 14 (P. corsoni, P. symphysis).
Romer and Fryxell 1928 A, 527 (P. corsoni, P. symphysis).
Middle Eocene (Bridger); Wyoming.

Pappichthys lævis Cope.

Hay, O. P. 1902 A, 381.
Hussakof, L. 1908 A, 86.
Merrill, G. P. 1907 A, 14.
Romer and Fryxell 1918 A, 525.
Middle Eocene (Bridger); Wyoming.

Pappichthys plicatus Cope.

Hay, O. P. 1902 A, 381.
Hussakof, L. 1908 A, 86.
Merrill, G. P. 1907 A, 14.
Peterson, O. A. 1919 A, 41 (This species?).
Middle Eocene (Bridger); Wyoming: Upper Eocene (Uinta); Utah.

Pappichthys sclerops Cope.

Hay, O. P. 1902 A, 381.
Merrill, G. P. 1907 A, 14.
Romer and Fryxell 1928 A, 525.
Middle Eocene (Bridger); Wyoming.

Pappichthys sp. indet.

Brown, B. 1907 A, 842. Upper Cretaceous (Hell Creek); Montana.
Gilmore, C. W. 1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.
Hay, O. P. 1927 D, 266-268.
Lindgren and Drake 1904 A, 3 (This genus?).
Pleistocene (Idaho); Idaho.
Lucas, F. A. 1900 H, 99. Pleistocene? Idaho.
Merrill, G. P. 1907 A, 14. Eocene (Bridger); Wyoming.
Russell, L. S. 1928 A, 107. Paleocene?; Alberta.
Sternberg, C. M. 1924 A, 68 (Pappicthys). Upper Cretaceous (Lance); Saskatchewan.

PARAMIATUS Romer and Fryxell. Type *P. gurleyi* Romer and Fryxell.

Romer and Fryxell 1928 A, 519.

Paramiatus gurleyi Romer and Fryxell.

Romer and Fryxell 1928 A, 519, figs. 1-3
Eocene (Green River); Wyoming.

STYLOMYLEDON Russell. Type *S. lacus* Russell.

Russell, L. S. 1928 A, 103.
1928 B, 264.
The systematic position of this genus is uncertain.

Stylomyleodon lacus Russell.

Russell, L. S. 1928 A, 103, figs. 1-4.
Paleocene (Paskapoo); Alberta.

Stylomyleodon sp. indet.

Russell, L. S. 1928 A, 103. Upper Cretaceous (Lance); Wyoming.

PLATACODON Marsh. Type *P. nanus* Marsh.

Hay, O. P. 1902 A, 565.
Gilmore, C. W. 1924 A, 68.
Palmer, T. S. 1904 A, 542, 887.
The relationships of this genus are very uncertain.

Platacodon nanus Marsh.

Hay, O. P. 1902 A, 565.
Ameghino, F. 1893 C, 81.
Bowen, C. F. 1915 A, 120.
Hatcher, J. B. 1901 A, 128, pl. i, figs. 5, 6.
Lull, R. S. 1915 D, 323, 345.
Russell, L. S. 1928 A, 106.
Upper Cretaceous (Lance); Wyoming.

Platacodon sp. indet.

Gilmore, C. W. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.
1924 D, 27 (Platæodon). Upper Cretaceous (Lance); Saskatchewan.
Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

Superorder TELEOSTEI Müller.

Müller, J. 1846 C.
Hay, O. P. 1902 A, 356 (Teleostomi, in part).
Abel, O. 1912 F, 300.
Aladyna, M. 1910 A, 239 ("téléostéens").
Allis, E. P. 1898 B, 83 ("teleosts").
1915 A.
1918 A, 241.
1918 B, 263.
1919 A, 372.
1922 A, 152.
1922 B.
1922 C, 3.
1923 A, 52.
1923 B.
1925 A, 75.
1926 A, 169.
Anthony, R. 1912 A ("téléostéens").
Arldt, T. 1907 D, 684.
1923 A, 495 ("teleostier").
Ayers, H. 1906 A, 77.
Baehr, W. B. 1906 A, 629 ("teleostier").
Baraldi, G. 1877 A, 28, 44.
Bardeleben, K. 1896 A, 113 ("teleostier").
1907 A, 36 ("teleostier").
Beer, G. R. 192^ A, 296, 330.
Belling, D. E. 1912 A, 46.
Bluntschli, H. 1912 B, 382 ("teleostier").
Böker, H. 1927 A, 15 ("teleostier").
Boulenger, G. A. 1901 A, 261 ("teleostean fishes").
1901 D, 43.
1902 B, 295.
1904 A, 162.
1904 D, 541.
Brandt, J. F. 1865 A, 22.
Braus, H. 1906 A ("teleostier").
Bridge, T. W. 1878 A, 705.
1896 A, 544.
Brohl, E. 1909 A, 345, 360 ("teleostier").
Bronn, H. G. 1848 B, 1218.
1849 A, 812, seq.
1862 B, 380.
Carlet, G. 1878 A, 1 ("téléostéens").
Carter, J. T. 1905 A, 129.
Cartier, O. 1875 A, 69 ("teleostier").
Carus, V. 1875 A, 516.
Cockerell, T. D. A. 1911 F, 367 ("teleosts").
Collinge, W. E. 1895 B, 274.
1895 C, 888.
Cunningham, J. T. 1897 A, 492 ("teleosteans").
1912 A, 245, 246.
Dana, J. D. 1863 C, 343 ("teleosts").
Dean, Gudger, Henn 1923 A, 703.
Derjugin, K. 1909 A.
1910 A, 572 ("teleostier").
1910 B, 209 ("teleostier").
Derjugin and Rozhdestvensky 1912 A, 643 ("teleostier").
Dietz, P. A. 1914 A, 99.
1917 A, 79 ("teleostier").
Dollo, L. 1889 E, 153 ("téléostéens").
1892 D, 120 ("téléostéens").
1909 B, (135).
Dombrowski, B. A. 1925 A, 70, fig. 3.
Dormitzer, M. 1852 A, 62 ("teleostier").
Eastman, C. R. 1917 A, 244.
Ebner, V. 1896 A, 146 ("teleostier").
Eggeling, H. 1906 A, 105 ("teleostier").
Elliot, A. J. M. 1907 A, 648.
Emery, C. 1895 A, 224 ("téléostiens").
Fiebiger, J. 1905 A, 141 ("teleostier").
Frassetto, F. 1915 A.
Fulton, T. W. 1906 A, 48 ("teleostean fishes").
Fürbringer, K. 1903 A, 377 ("teleostier").
Fürbringer, M. 1904 A ("teleostier").
Gaupp, E. 1897 A, 543 ("teleosteer").
1898 B ("teleostier").
1901 B, 935 ("teleostier").
1903 A, 113 ("teleostier").
1905 D, 911 ("teleostier").
1905 E, 161 ("teleostier").
1906 B ("teleostier").
Gegenbaur, C. 1866 A, 123 ("teleostier").
1867 A, 60 ("teleostier").
1867 B, 377, 393 ("teleostier").
1871 B ("teleostier").
Gill, T. 1885 C, 98-298.
1905 A, 659.
1909 B, 838.
Goette, A. 1879 A, 117 ("teleostier").
1901 A, 557 ("teleostier").
Gootsch, W. 1915 A, 435 ("teleostier").
1920 A, 12 ("teleostier").
Goodrich, E. S. 1904 A, 471.
1906 A, 344 ("teleosts").
1922 A, 505 ("teleosts").
1924 A, 935.
Gregory, W. K. 1904 A, 62.
1907 D, 449, 466.
Haeckel, E. 1868 A, 441, 446.
1873 A, 512, 516.
1893 A, 242 ("teleostier").
Haller, B. 1906 A, 231 ("teleostier").
Hamburger, R. 1904 A, 75 ("teleostier").

Hammarsten, O. D. 1911 A ("teleostier").
Harrison, R. G. 1893 A, 248 ("teleostier").
1894 A ("teleosts").
1895 A, 500 ("teleostier").
Hase, A. 1907 A, 607 ("teleosteer").
1913 A, 147.
Hasse, C. 1872 A, 419 ("teleostier").
1873 A, 603 ("teleostier").
1873 B, 614 ("teleostier").
Hasse and Schwarck 1870 A, 29, 44 ("teliostier").
Hatschek, B. 1889 B, 115.
Hawkes, O. A. M. 1905 A, 82 ("teleosts").
Heckel, J. 1850 B, 143 ("teleostïer").
1851 A, 219 ("teleostier").
Hennig, E. 1920 B, 113 ("teleostier").
Hill, C. 1900 A, 426.
Hilzheimer, M. 1913 A, 471 ("teleostier").
Höfer, B. 1890 A, 106 ("teleostier").
Hoernes, R. 1886 A, 526.
Hubbs, C. L. 1919 A, 570.
1926 A, 73 ("teleosts").
Huxley, T. H. 1859 D, 420.
1859 H, 36.
1861 D, 449.
1863 F, 427.
1876 E, 103, 121.
1880 E, 471.
1883 B, 570.
Jacobshagen, E. 1920 A, 88 ("teleosteer").
Jaekel, O. 1903 F, 37, 46 ("teleostier").
1906 A, 16 ("teleostier").
1908 B, 469 ("teleostier").
1909 D, 719 ("teleostier").
1911 A, 87 (Teleostea).
Jordan, D. S. 1885 A, 98.
1907 B, 225, 761.
1909 A, 565 ("bony fishes").
1923 A, 116.
Keyes, C. A. 1922 A, pl. iii.
Kiaer, J. 1924 A, 95, 113.
Kingsley, J. S. 1894 A, 640 ("teleosts").
1900 A, 249 ("teleosts").
1912 B, 79, figs. 76-78.
1925 A, 12, 33, 105, 237 ("teleosts").
Klaatsch, H. 1890 A, 155, 182, 217 ("teleostier").
1893 B, 654 ("teleostier").
1893 C, 181.
Kolzoff, N. K. 1896 A, 514 ("teleostier").
Koschkaroff, D. N. 1906 A, 209 ("teleostier").
Laaser, P. 1903 A, 571 ("teleostier").
Lakjer, T. 1927 A, 278.
Leunis and Ludwig 1883 A, 657.
Lönnberg, E. 1901 A.
Lütken, C. 1868 C.
1871 A, 286 ("téléostéens").
McMurrich, J. P. 1883 A, 640.
Matthes, E. 1921 A, 226 ("teleostier").
Meek, A. 1916 A, 59.
Menmuir, W. H. 1902 A, 273.
Miall, L. C. 1872 A, 31 ("teleostean").
Müller, J. 1845 A, 129, 135.
Nauck, E. T. 1926 B, 69 ("teleostier").
Norman, E. W. 1926 A ("teleosts").
Nusbaum, J. 1907 A, 297 ("teleostier").
1908 A, 515 ("teleostier").
1908 B, 505 ("teliostier").
Oswald, F. 1909 A, 126.
Paget and Savage 1916 A, 258 ("teleostean fish").
Palacký, J. 1902 B, 141 ("teleosteer").
Parker, W. K. 1879 C, 341.
1881 C, 71.
1888 C, 399.
Parker and Haswell 1897 A, 204.
Pehrson, T. 1922 A ("teleosts").
Petronievics, B. 1919 A, 413 ("téléostéens").
Pompeckj, J. F. 1913 A, 1145.
Prince, E. E. 1887 A, 697 ("teleosteans").
Puccioni, N. 1908 A, 56.
Pychlau, W. 1908 A, 692 ("teleostier").
Rauther, M. 1913 A, 1100.
1919 A, 214 ("teleostier").
Regan, C. T. 1904 A, 330, 331, 346.
1909 A, 66 ("teleosteans").
1909 B, 75, 76.
1912 B, 841.
1923 B, 458 (Teleostei; Neopterygii in part).
Retterer, E. 1905 C, 246 ("téléostéens").
Reynolds, S. H. 1897 A, 105, 106, 126, 556.
Ridewood, W. G. 1894 A, 635.
1896 A, 389.
Röse, C. 1897 A, 60 ("teleostier").
Rohon, J. V. 1902 A, 25 ("teleostier").
Romer, A. S. 1924 A, 122, 138, figs. 1, 10.
Rosén, N. 1915 A, 1 ("teliostier").
1916 A, 24.
Ryder, J. 1885 E, 93 ("teleosts").
1886 A, 71.
Sabatier, A. 1898 A, 928 ("téléostéens").
Sagemehl, M. 1883 A ("teleostier").
1884 A ("teliostier").
Sauvage, H. E. 1872 A, 118 ("téléostéens").
Schauinsland, H. 1906 A, 456 ("teleostier").
Scheel, C. 1893 A, 1 ("teleostier").
Schleip, W. 1904 A, 335 ("teleostier").
Schlesinger, G. 1909 A, (147).
Schlosser, M. 1898 D, 120 ("teleostier").
1917 A, 137, 138 ("teleostier").
Schmalhausen, J. J. 1912 A, 542.
1916 C, 207 ("teleosts").
Schmid-Monnard, C. 1883 A, 97 ("teleostier").
Schöne, G. 1902 A, 1 ("teleostier").
Schuchert, C. 1915 A, 690.
Semon, R. 1898 A, 100 ("teleostier").
Sewertzoff, A. 1896 A, 242 ("teleostier").
1918 A, 207.
1925 A, 276.
1926 A, 481.
1926 C, 42.
1926 D, 83.
1926 F, 274.
Shann, E. W. 1919 A, 558.
Siebenrock, F. 1901 A, 105 ("teleostier").
Solger, B. 1880 A, 388.
Sonies, F. 1907 A, 405 ("teleostier").
Stadtmüller, F. 1926 A, 156, figs. 1, 2 ("teleostier").
Stannius, H. 1854 A, 4, seq.
Stensiö, E. A. 1921 A, 276.
1925 A, 51, 62, 119.
Stephan, P. 1898 A, 355 ("téléostéens").
Stöhr, P. 1882 A, 71 ("teliostier").

Stromer, E. 1912 A, 32, 48.
1917 A, 22.
1925 B, 348, 350.
Supino, F. 1904 A, 625.
Swinnerton, H. H. 1905 A, 319, 321 ("teleosts").
Swinnerton, H. W. 1905 A, 363 ("teleosts").
Terra, P. 1911 A, 206.
Tichomirow, A. 1885 A, 533 ("teleostier").
Tims, H. W. 1905 A, 39, 58.
Tomes, C. S. 1875 C, 362.
1876 A, 257.
Totton, A. K. 1914 A, 257 ("teleosts").
Traquair, R. H. 1870 A, 166.
1900 C, 508.
Uhlmann, E. 1921 A.
Ussow, S. 1900 A, 175 ("teleostier").
Veit, O. 1907 A, 174 ("teleostier").
Wallace, A. R. 1876 A, ii, 424.
Walther, J. 1882 A, 82 ("teleostier").
Watson, D. M. S. 1925 A, 851, 865.
1926 A, 202 ("teleosts").
Whitehouse, R. H. 1910 B, 590.
1910 C, 135 ("teleosts").
1918 A, 139 ("teleosts").
Woodward, A. S. 1898 C, 257.
1906 A, 314 ("teleosteans").
1915 B, lxxiv ("teleostean fishes").
1922 C, 96.
Woodward, H. 1878 A, 22.
Wright, W. 1909 A, 672 ("teleostean fishes").
Zittel and Koken 1911 A, 117.
Zittel and Schlosser 1923 A, 120.
Zittel and Woodward 1902 A, 92.

Class OSTARIOPHYSI.

Abel, O. 1919 A, pp. 56, 157.
Allis, E. P. 1905 A, p. 420.
Arldt, T. 1923 A, p. 505 ("ostariophysen").
Boulenger, G. A. 1901 D, p. 129.
1904 A, pp. 162, 165.
1904 D, p. 573.
1918 B, p. 199 ("ostariophysiens").
Bridge and Haddon 1893 A, 65 (Ostariophyseæ).
Chranilov, I. 1926 A, 49.
Cope, E. D. 1891 N, 22 (Plectospondyli).
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 693.
Dietz, P. A. 1917 A, 84.
Eigenmann, C. H. 1890 B, 10 (Ostariophysiæ).
Frost, G. A. 1925 A, 553.
Gaupp, E. 1898 B, 823, 865 ("ostariophysen").
Gill, T. 1905 A, 659.
1905 C, p. 617 ("ostariophysial fishes").
Goodrich, E. S. 1909 A, 371 (Cypriniformes).
Gregory, W. K. 1907 D, 449, 472.
Hubbs, C. L. 1919 B, 61.
Jaekel, O. 1911 A, 69, 90.
Jordan, D. S. 1904 A, 598.
1905 A, ii, 159, 584.
1907 B, 265, 378, 763.
1923 A, 134.
Jordan and Evermann 1896 A, 114.
Klaatsch, H. 1890 A, 185 ("ostariophyen").
Meek, A. 1916 A, 168.
Müller, J. 1846 C (Physostomi, in part).
Norman, E. W. 1926 A, 405.
Nusbaum, J. 1908 A, 514 ("ostariophysen").
Rauther, M. 1913 A, 1100.
Regan, C. T. 1909 B, 77.
1911 F, 13.
1911 G, 553.
1912 B, 841, 843.
1922 A, 203.
1924 A, 175.
Ridewood, W. G. 1904 B, 215.
Sachs, M. M. 1912 A, 725.
Sagemehl, M. 1884 A, 22, 25 ("ostariophysen").
Schlesinger, G. 1909 A, (151).
Sörensen, W. 1894 A, 112 (Ostariophyseæ).
1895 A, 400 (Ostariophyseæ).
Stromer, E. 1912 A, 34.
Swinnerton, H. W. 1905 A, 378.
Thilo, O. 1908 A, 788.
Whitehouse, R. H. 1910 B, 598.
Woodward, A. S. 1901 A, ix, 296.
1922 C, 99.
Zittel and Koken 1911 A, 119.

Suborder CHARACINIFORMES Regan.

Regan, C. T. 1922 A, 203.
Boulenger, G. A. 1904 D, 575 (Characinidæ).
Gill, T. 1893 A, 131 (Heterognathi).
1896 E, 205 ("heterognaths").
Goodrich, E. S. 1909 A, 374 (Characinoidei).
Gregory, W. K. 1907 D, 449 (Heterognathi).
Jordan, D. S. 1905 A, ii, 161 (Heterognathi).
1923 A, 134 (Heterognathi).
Jordan and Evermann 1896 A, 329 (Heterognathi)
Regan, C. T. 1911 F, 15 (Characiformes).
Zittel and Schlosser 1923 A, 123 (Characinoidei).

Superfamily CHARACINOIDÆ, new form.

Frost, G. A. 1925 A, 554 (Charicinformes).
Goodrich, E. S. 1909 A, 374 (Characinoidei).

CHARACINIDÆ Richardson.

Richardson, J. 1856 A, 245.
Abel, O. 1922 F, 77.
Allis, E. P. 1909 A, 213.
Arldt, T. 1907 D, 645.
1923 A, 505 ("characiniden").
Boulenger, G. A. 1901 D, 131, 132.
1904 D, 575.
1917 B, 330.
1918 A, 195.
1918 B, 197 ("characinides").

Bridge and Haddon 1893 A, 65.
Cockerell, T. D. A. 1923 E, 418.
Cope, E. D. 1871 T, 454.
1872 C, 332.
Dean, Gudger, Henn 1923 A, 674.
Gadow, H. 1913 A, 94.
Gaupp, E. 1905 D, 913 ("characiniden").
Gill, T. 1872 C, 16.
1885 C, 132.
1896 E, 205 (Characidæ, Characinidæ).
Gregory, W. K. 1907 D, 473 ("characins").
Günther, A. C. 1880 A, 606.
1881 A, 692.
Jordan, D. S. 1885 A, 125, 132.
1923 A, 134.
Jordan and Evermann 1896 A, 331.
Jordan and Gilbert 1882 A, 254.
Kesteven, H. L. 1926 B, 204.
Kindred, J. E. 1919 A.
Klein, E. F. 1879 A, 104.
1881 A, 330.
1884 A, 135, 138, 147, 153, 156, 199, 226, 243, 246, 248.
1885 A, 116, 130, 144, 164, 195, 199, 211.
Klein, E. F. 1886 A, 225, 260, 290.
Kölliker, A. 1859 A, 665 (Characini).
Loomis, F. B. 1921 A, 194 (Characidæ).
Meek, A. 1916 A, 168.
Norman, E. W. 1926 A.
Rauther, M. 1913 A, 1100.
Regan, C. T. 1911 F, 15 (Characidæ).
1916 B, 546 (Characidæ).
1922 A, 203.
1924 A, 175.
Reissner, E. 1859 B, 429 ("characinen").
Sagemehl, M. 1884 A, 1-119 ("characiniden").
Schelaputin, G. 1906 A, 97 ("characiniden").
Shepherd, C. E. 1910 B, 296, pl. ii, fig. 7.
1916 A, 178.
Siebenrock, F. 1901 A.
Sörensen, W. 1894 A, 111 (Characini).
Stannius, H. 1854 A, 5, 25, 99 (Characini).
Starks, E. C. 1926 A, 88.
Stensiö, E. A. 1925 A, 36.
Terra, P. 1911 A, 212.
Woodward, A. S. 1901 A, 297.
Wright, R. R. 1885 A, 108.
Zittel and Schlosser 1923 A, 123.

Ischyrhiza Leidy. Type *I. mira* Leidy.

Hay, O. P. 1902 A, 398.
Arldt, T. 1923 A, 517 (Ichyrorhiza).
Boulenger, G. A. 1918 A, 195.
1918 B, 199.
Eastman, C. R. 1901 B, 111.
1904 E, 298 (Syn. of Onchosaurus).
1904 H, 93.
1917 A, 297.
Fowler, H. W. 1911 A, 167.
Jordan, D. S. 1919 B, 272 (Syn.? of Pachyrhizodus).
1923 A, 118.
Priem, F. 1908 B, 62.
Eastman, C. R. 1917 A, 298, pl. xi, fig. 2.
Fowler, H. W. 1911 A, 167, fig. 103.
Gidley, J. W. 1911, in Veatch and Stephenson 1911 A, 208, 215.
1926 F, 192, pl. lxii, fig. 10.
Hay, O. P. 1923 A, 363.
Hussakof, L. 1908 A, 77.
Priem, F. 1908 B, 62, fig. 25 (I. antiqua).
Upper Cretaceous (Woodbury, etc.); New Jersey: (Ripley); Mississippi, Georgia, South Carolina, North Carolina: (Fox Hills); New Mexico: (Monmouth?); Maryland.

Ischyrhiza mira Leidy.

Hay, O. P. 1902 A, 398.
Berry, E. W. 1916 A, 358, pl. ix, figs. 6-8.
Boulenger, G. A. 1918 B, 199 (I. antiqua).
Eastman, C. R. 1901 B, 111.
1904 E, 298 (I. antiqua a syn.).
1904 H, 93.

Ischyrhiza? radiata Clark.

Hay, O. P. 1902 A, 398.
Clark and Miller 1912 A, 117, 118 (Xiphias?).
Eastman, C. R. 1901 B, 112, pl. xii, fig. 8 (Xiphias?).
Woodward, A. S. 1901 A, 46, 614.
Eocene (Pamunkey); Virginia: (Aquia); Maryland.

ERYTHRINOLEPIDÆ Cockerell.

Cockerell, T. D. A. 1919 A, 182.
Jordan, D. S. 1923 A, 119 (To Clupeoidæ).

Erythrinolepis Cockerell. Type *E. mowriensis* Cockerell.

Cockerell, T. D. A. 1919 A, 182.

Erythrinolepis chicoensis Cockerell.

Cockerell, T. D. A. 1919 A, 182, pl. xxxvi, figs. 1, 2.
Upper Cretaceous (Chico); California.

Erythrinolepis mowriensis Cockerell.

Cockerell, T. D. A. 1919 A, 182, pl. xxxvi, figs. 3-6.
Upper Cretaceous (Mowry); Wyoming.

Suborder Cypriniformes Goodrich.

Goodrich, E. S. 1909 A, 371.
Hay, O. P. 1902 A, 394 (Plectospondyli).
Chranilov, I. 1926 A, 51.
Cope, E. D. 1871 T, 452 (Plectospondyli).
1872 C, 332 (Plectospondyli).
Gill, T. 1861 B, 6 (Eventognathi).
Gill, T. 1885 C, 125 (Eventognathi).
1905 G, 196 ("eventognaths").
Jordan, D. S. 1885 A, 125 (Eventognathi).
1907 B, 382 (Plectospondyli).
1923 A, 139 (Eventognathi).
Lönnberg, E. 1902 A (Cyprinoidei).

Regan, C. T. 1911 F, 13, 14 (Cyprinoidea).
1911 G, 555 ("cyprinoids").
1922 A, 203 (Cyprinoidea).
Starks, E. C. 1904 C, 254 (Plectospondyli).
Zittel and Schlosser 1923 A, 123.

Superfamily CYPRINOIDÆ, a term given superfamily significance.

Boulenger, G. A. 1918 B, 199 ("cyprinides").
Eigenmann, C. H. 1890 B, 10 (Eventognathi).
Frost, G. A. 1925 A, 553 (Cyprinoidea).
Gill, T. 1861 B, 6 (Eventognathi).
1905 F ("eventognaths").
Gregory, W. K. 1907 D, 450, 477 (Eventognathi).
Jordan, D. S. 1905 A, ii, 162, 569 (Eventognathi).
1907 B, 381, 764 (Eventognathi).
Norman, E. W. 1926 A, 415 (Cyprinoidea).
Regan, C. T. 1909 B, 77 (Cyprinoidei).
1911 F, 26 (Cypriniformes).

CATOSTOMIDÆ Cope.

Cope, E. D. 1872 C, 332.
Hay, O. P. 1902 A, 394 (Catostominæ).
Arldt, T. 1907 D, 284, 285 (Catostominæ).
1912 A, 716, 762 (Catostominæ).
1923 A, 506 ("catastominen").
Boulenger, G. A. 1904 D, 581 (Catostominæ).
Chranilov, I. 1926 A, 49.
Cockerell, T. D. A. 1913 B, 139.
Cockerell and Allison 1909 A, 157.
Edwards, L. F. 1926 A, 257 (Catastomidæ).
Gill, T. 1861 B, 8 (Catastomoidæ).
1875 B, 252 (Catastomidæ).
Gill, T. 1885 C, 131.
1905 G, 196 ("catostomids").
Goodrich, E. S. 1909 A, 375 (Catostominæ).
Jordan, D. S. 1885 A, 131.
1905 A, ii, 171, 562.
1907 B, 390.
1923 A, 139.
Meek, A. 1916 A, 173 (Catostominæ).
Rauther, M. 1913 A, 1101 (Catostominæ).
Regan, C. T. 1911 F, 27.
1922 A, 205.
Sagemehl, M. 1891 A ("catastomiden").

CATOSTOMUS Le Sueur. Type *Cyprinus catostomus* Forster.

Hay, O. P. 1902 A, 394.
Allis, E. P. 1909 A, 11.
1919 C, 252.
Arldt, T. 1907 D, 284, 285.
Chranilov, I. 1926 A, 49, figs. 1-3.
Cockerell, T. D. A. 1910 B, 62.
1911 F, 370.
1913 B, 139.
Cockerell and Allison 1909 A, 158, fig. 2.
Duméril, A. 1856 A, 410 ("catostome").
Edwards, L. F. 1926 A, 257, figs. 1-6 (Catastomus).
Heilprin, A. 1887 A, 68.
Hilgard, T. C. 1858 A, 89.
1860 A, 679.
Hyrtl, C. J. 1862 A, 101.
Jordan, D. S. 1885 A, 132.
Jordan and Evermann 1917 A, 96.
Jordan and Gilbert 1882 A, 124.
Regan, C. T. 1922 A, 206.
Sagemehl, M. 1884 A, 7, 102.
1891 A, 543, pls. xx, xxvii.
Scharff, R. F. 1911 A, 89.
Stannius, H. 1854 A (Catastomus).
Woodward, A. S. 1901 A, 299.

Catostomus cristatus Cope.

Hay, O. P. 1902 A, 394.
1927 D, 265, 268.
Hussakof, L. 1908 A, 65, fig. 33.
Pleistocene (Idaho); Idaho.

Catostomus reddingi Cope.

Cope, E. D. 1883 L, 160.
Hussakof, L. 1908 A, 66, fig. 34.
Pleistocene (Idaho); Idaho.

Catostomus shoshonensis Cope.

Hay, O. P. 1902 A, 394.
1927 D, 265, 268.
Pleistocene (Idaho); Idaho.

CHASMISTES Jordan and Gilbert. Type *C. liorus* Jordan.

Jordan, D. S. 1878, Bull. Hayden's Geol. Surv., IV, 417.
Arldt, T. 1923 A, 506.
Cope, E. D. 1883 L, 148.
Jordan, D. S. 1907 A, 140.
1919 B, 396.
Jordan and Evermann 1896 A, 182.
Jordan and Gilbert 1882 A, 131.

Chasmistes batrachops (Cope).

Hay, O. P. 1902 A, 394 (Catostomus).
1927 D, 242 (Catostomus); 243 Chamistes.
Hussakof, L. 1908 A, 65, fig. 32 (Catostomus).
Starks, E. C. 1907, in Jordan, D. S. 1907 A, 143, 144, fig. 33.
Pleistocene (Fossil Lake); Oregon.

Chasmistes oregonus Starks.

Starks, E. C. 1907, in Jordan, D. S. 1907 A, 141, 144, fig. 32.
Hay, O. P. 1902 A, 394 (Catostomus labiatus, in part).
Cope, E. D. 1883 L, 150 (Catostomus labiatus, not of Ayres).
Hay, O. P. 1927 D, 243.
Pleistocene (Fossil Lake), Oregon.

AMYZON Cope. Type *A. mentale* Cope.

Hay, O. P. 1902 A, 395.
Arldt, T. 1907 D, 285.
1923 A, 506.
Cockerell, T. D. A. 1906 A, 163.
1908 C, 164.
Eastman, C. R. 1917 A, 292.
Regan, C. T. 1922 A, 206.
Schlosser, M. 1917 A, 144.
Woodward, A. S. 1901 A, 300.

Amyzon brevipinne Cope.

Hay, O. P. 1902 A, 395.
Eastman, C. R. 1917 A, 292, pl. xix, figs. 1, 2.
Lambe, L. M. 1904 C, 30, 39, 44.
1906 C, 151, pl. i, figs. 1, 2.
1906 D, 174.
1906 E, 137.
Woodward, A. S. 1901 A, 300.
Tertiary (Amyzon beds); British Columbia

Amyzon commune Cope.

Hay, O. P. 1902 A, 395.
Cockerell, T. D. A. 1908 C, 164.
Lambe, L. M. 1906 C, 151, pl. i, fig. 3.
1906 E, 137.
Merrill, G. P. 1907 A, 6.
Woodward, A. S. 1901 A, 300.
Miocene (Florissant); Colorado.

Amyzon fusiforme Cope.

Hay, O. P. 1902 A, 395.
Cockerell, T. D. A. 1908 C, 164.
Woodward, A. S. 1901 A, 300.
Miocene (Florissant); Colorado.

Amyzon mentale Cope.

Hay, O. P. 1902 A, 395.
Cockerell, T. D. A. 1908 C, 164.
Merrill, G. P. 1907 A, 6.
Woodward, A. S. 1901 A, 300.
Miocene (Florissant); Colorado.

Amyzon pandatum Cope.

Hay, O. P. 1902 A, 395.
Cockerell, T. D. A. 1908 C, 164.
Woodward, A. S. 1901 A, 300.
Miocene (Florissant); Colorado.

Amyzon sp. indet.

Cockerell, T. D. A. 1914 A, 190.
Miocene (Florissant); Colorado.

CYPRINIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 94, 113.
Hay, O. P. 1902 A, 394.
Abel, O. 1912 F, 518 ("cypriniden").
1919 A, 49, fig. 23 (Cyprinus).
1922 F, 77.
Agassiz, L. 1836 A, 149.
1838 A, 73 ("karpfen").
1840 C, 110, pl. iv, fig. 7 (Cyprinus).
1844 D, 139 ("cycloides").
1845 C, 325 (Cyprini).
Alessandrini, A. 1849 A, 375, pl. xxiii, figs. 1, 3 (Cyprinus).
Allis, E. P. 1897 A, 13.
1898 A, 436.
1898 B, 95.
1905 A, 401, 437.
1909 A, 213.
1913 A, 327.
1918 A, 242.
1922 B, 204.
Anonymous 1821 A, 273 (Cyprinus).
Arldt, T. 1907 D, 649.
1912 A, 716, 762.
1923 A, 506 ("cypriniden").
Baehr, W. B. 1906 A, 629 (Cyprinus).
Baudelot, E. 1873 A, 97, 206, pls. x, xi (Cyprinus).
Belling, D. E. 1912 A, 60 ("cyprinoiden").
Bonaparte, C. L. 1833 B, 1200.
1838 B, 132.
Boulenger, G. A. 1904 A, 166.
1904 D, 581, 737.
1917 B, 330.
Bridge, T. W. 1878 A, 705 (Cyprinoidei).
1896 A, 547.
Bridge and Haddon 1893 A, 65-333.
Bronn, H. G. 1849 A, 780 (Cyprinoidei).
Carus, V. 1875 A, 564 (Cyprinoidei)
Chranilov, I. 1925 A, 90.
1926 A, 49.
Cockerell, T. D. A. 1910 A, 475.
1910 F, 1.
1911 E, 213.
1911 F, 371.
1913 B, 128.
Cockerell and Allison 1909 A, 157.
Cockerell and Callaway 1909 A, 121.
Cockerell and Moore 1910 A, 252.
1910 B, 91 ("cyprinids").
Collinge, W. E. 1895 B, 286.
Cope, E. D. 1871 T, 454.
Cunningham, J. T. 1912 A, 247.
Cuvier, G. 1805 A ("carpes").
1815 A, 110 ("cyprinus").
Dean, Gudger, Henn 1923 A, 676.
Demoll, R. 1921 A, 442, pls. xv, xvi ("karpfen").
Derjugin, K. M. 1909 A (Cyprinoidea).
Dormitzer, M. 1852 A, 62 ("cypriniden").
Duméril, A. 1856 A, 404 ("cyprinoides").
Ebner, V. 1896 A, 127 ("cyprinoiden").
Eimer, G. H. T. 1901 A ("cyprinoiden").
Fitzinger, L. J. 1873 A, 38 (Cyprini).
Friedmann, E. 1897 A, 567, figs. 10-16 (Cyprinus).
Frost, G. A. 1925 A, 556.
Fryd, C. 1901 A, 35.
Fulton, T. W. 1906 A, 77.
Gadow, H. 1913 A, 94.
Gatzinow, V. 1900 A, 86 ("cyprinoiden").
Gaupp, E. 1901 B, 939 ("cyprinoiden").
Geoffroy-St. Hilaire, E. F. 1807 B, 414 ("cyprins").
1824 A, 140 ("cyprins").

Geoffroy-St. Hilaire, E. F. 1824 B, 145 ("cyprins").
1824 E, 100 (Cyprinus).
1824 G, 439 (Cyprinus).
Giebel, C. G. 1855 A, 107 ("cyprinoides").
Gill, T. 1861 B, 7 ("cyprinoidæ").
1865 E, 69 ("cyprinoids").
1875 B, 254 ("cyprinoids").
1885 C, 126.
1905 C, 617 ("cyprinids").
1905 G, 195 ("cyprinids").
Goetsch, W. 1915 A, 459 (Cyprinus).
1920 A, 10, 16 (Cyprinus).
Goette, A. 1879 A, 127 ("cyprinoiden").
1901 A, 533 ("cypriniden").
Goodrich, E. S. 1909 A, 375, fig. 358.
Gregory, W. K. 1907 D, 450.
Haller, B. 1906 A, 254, pl. xvi, fig. 11 ("cyprinoiden").
Hamburger, R. 1904 A, 79, 84, pl. ii (Cyprinus, Squalius).
Hase, A. 1907 A ("cypriniden").
Hasse, C. 1872 A, figs. (Cyprinus).
1873 A, 583, figs. 1-6 ("cyprinoiden").
Hasse and Schwarck 1870 A, 45 ("cyprinoiden").
Heckel, J. 1836 A, 221 ("cyprinen").
1850 A, 364 ("cypriniden").
1850 B, 146 ("cypriniden").
1851 A, 222 ("cypriniden").
Heilprin, A. 1887 A, 68, 69.
Hilgard, T. C. 1857 A, 679 ("cyprinoids").
Hoernes, R. 1886 A, 531 (Cyprinoidei).
Hoppe, R. 1894 A, 5 pl. i (Leuciscus).
Hora, S. L. 1922 A, 1, figs. 1, 2 (Labeo).
Hubbs, C. L. 1919 B, 65.
1926 A, 58 ("cyprinids").
Huxley, T. H. 1859 D, 401, fig. 6 ("carp").
1859 H, 38.
1863 F, 427 ("cyprinoids").
Hyrtl, C. J. 1862 A, 95 ("cyprinoiden").
Ihering, H. 1891 C, 24 ("cypriniden").
1909 A, 289 ("cypriniden").
Imms, A. D. 1904 A, 23.
Jordan, D. S. 1885 A, 126.
1905 A, ii. 163, 565.
1907 B, 382.
1923 A, 139.
Jordan and Gilbert 1882 A, 144.
Kesteven, H. L. 1922 A, 315.
1926 B, 204.
Kindred, J. E. 1919 A.
Klaatsch, H. 1890 A, 158, 185 ("cyprinoiden").
Klein, E. F. 1868 A ("cypriniden").
1879 A, 70, 79, 109, 118, 123 (Cyprinoidei).
1884 A, 135, 138, 147, 156, 164, 201, 246, 251.
1885 A, 115, 130, 150, 164, 177, 199, 214, 247.
1886 A, 226, 262, 293.
Kner, R. 1861 A, 243 (Cyprinoidei).
Köstlin, O. 1844 A ("cyprinoiden").
Kolzoff, N. K. 1896 A, 19, figs. 8, 9.
Lavocat, A. 1896 B, 194 ("carpes").
Leunis and Ludwig 1883 A, 726.
Mantell, G. A. 1844 A, 665 ("cyprinoids").
McMurrich, J. P. 1883 A, 629 ("cyprinoids").
Meckel, J. F. 1825 A ("karpfen").
Meek, A. 1916 A, 173.
Mivart, St. G. 1871 B, 376 ("carp").
Moodie, R. L. 1922 B, 320.
Müller, J. 1841 B, cliii ("cyprinen").
Norman, E. W. 1926 A.
Nusbaum, J. 1881 A, 552.
1908 A, 513 (Cyprinus).
1908 B, 506 ("cyprinoiden").
Owen, R. 1866 A, 10, 43.
Palacký, J. 1902 B, 149 ("cypriniden").
Pevsner, V. 1926 A, 303, figs. 1-6 (Carassius, Rutilus).
Peyer, B. 1922 A, 496 (Cyprinus).
Pychlau, W. 1908 A, 693 ("cyprinoiden").
Rauther, M. 1913 A, 1101.
Regan, C. T. 1911 F, 27.
1922 A, 205.
1924 A, 175.
Reis, C. 1905 A, 222 ("cyprinoides").
Reissner, E. 1859 B, 429 ("cyprinoiden").
Ryder, J. 1886 A, 72 ("cyprinoids").
Sabatier, A. 1896 A, 122 ("cyprinides").
Sachs, M. M. 1912 A, 725 ("cyprinoiden").
Sagemehl, M. 1883 A ("cypriniden").
Schauinsland, H. 1906 A, 474 ("cyprinoiden").
Scheel, C. 1893 A, 16 ("cyprinoiden").
Schelaputin, G. 1906 A, 97 (Cyprinoidæ).
Schlosser, M. 1917 A, 144 ("cypriniden").
Schmalhausen, J. J. 1913 A, 12 ("cyprinen").
Shepherd, C. E. 1910 A, 419.
1910 B, 296, pl. i, fig. 16 (Cyprinus).
1912 A, 201 (Cyprininæ).
1916 A, 178.
Siebenrock, F. 1901 A, 108.
Sorensen, W. 1894 A, 114 (Cyprinoidei).
1895 A, 401.
Solger, B. 1880 A, 382 (Cyprinus).
Stannius, H. 1849 A, 539 (Cyprinus).
Starks, E. C. 1916 A, 20.
Stensiö, E. A. 1925 A, 36.
Stephan, P. 1898 A, 358 ("cyprinidés").
1900 A, 296 ("cyprinidés").
Storch, O. 1911 A, 201 ("goldfische").
Stoss, H. 1921 A, 411, pl. xviii; text-figs. 1-12 ("cypriniden").
Terra, P. 1911 A, 210.
Thilo, O. 1908 A, 777, 788.
Trouessart, E. L. 1906 A, 212.
Uhlmann, E. 1921 A, 322 ("cypriniden").
Vaillant, L. 1896 A, 275 ("cyprinoides").
Wagner, R. 1843 A ("karpfen").
Wallace, A. R. 1876 A, ii, 451.
Weber, E. H. 1821 A, 1061 (Cyprinus).
Williamson, W. C. 1851 A, 650, pl. xxviii, fig. 9 ("carp").
Woodward, A. S. 1901 A, 299.
Zittel and Koken 1911 A, 122.
Zittel and Schlosser 1923 A, 123.
Zittel and Woodward 1902 A, 100.

MYLOPHARODON Ayres.

Ayres, W. O. 1855, Proc. Calif. Acad. Nat. Sci., 33.
Arldt, T. 1923 A, 507.

Type *M. robustus* Ayres.

Cockerell, T. D. A. 1913 B, 130.
Gill, T. 1865 E, 70.
Jordan and Evermann 1896 A, 219.

Newberry, J. S. 1870 D, 28.

Mylopharodon conocephalus Baird and Girard.

Baird and Girard 1854, Proc. Acad. Nat. Sci. Phila., 134 (Gila).

Hay, O. P. 1927 D, 216.
Jordan, D. S. 1907 A, 131.
Jordan and Evermann 1896 A, pt. i, 219.
Miller, L. H. 1912 A, 71 (This species?).
Sinclair, W. J. 1904 A, 18 (This species?).
Pleistocene (Potter Creek Cave), California.

PTYCHOCHEILUS Agassiz. Type *P. gracilis* Agassiz = *Gila grandis* Ayres.

Agassiz, L. 1855, Amer. Jour. Sci. (2), xix, p. 227.
Cockerell, T. D. A. 1913 B, 131.
Jordan, D. S. 1885 A, 129, fig. 86.
Jordan and Evermann 1896 A, 224 (Type P. gracilis).
Jordan and Gilbert 1882 A, 225 (Type P. oregonensis).

Ptychocheilus grandis (Ayres).

Ayres, W. O. 1854, Proc. Acad. Nat. Sci. Calif., 18 (Gila).
Hay, O. P. 1927 D, 216.
Jordan, D. S. 1905 A, i, 164, fig. 125; ii, 169, fig. 13 (P. grandis).
Jordan and Evermann 1896 A, 224 (Syn. of P. oregonensis).
Jordan and Gilbert 1882 A, 226 (Type P. oregonensis).
Miller, L. H. 1912 A, 71 (This species?).
Sinclair, W. J. 1904 A, 18.
This species may be identical with *P. oregonensis*.
Recent; Rivers about San Francisco: Pleistocene; California.

Ptychocheilus tularis Jordan.

Jordan, D. S. 1927 B, 95.
Pleistocene?; California.

DIASTICHUS Cope. Type *D. macrodon* Cope.

Hay, O. P. 1902 A, 395.

Diastichus macrodon Cope.

Hay, O. P. 1902 A, 395.
1927 D, 265, 268.
Woodward, A. S. 1901 A, 322.
Pleistocene (Idaho); Idaho.

Diastichus parvidens Cope.

Hay, O. P. 1902 A, 395.
1927 D, 265, 268.
Woodward, A. S. 1901 A, 322.
Pleistocene (Idaho); Idaho.

Diastichus strangulatus Cope.

Hay, O. P. 1902 A, 395.
1927 D, 265, 268.
Hussakof, L. 1908 A, 70; pl. v, figs. 5, 6.
Woodward, A. S. 1901 A, 322.
Pleistocene (Idaho); Idaho.

APHELICHTHYS Cope. Type *A. lindahlii* Cope.

Hay, O. P. 1902 A, 395.

Aphelichthys lindahlii Cope.

Hay, O. P. 1902 A, 395.
Pliocene or Pleistocene; Illinois.

SIPHATELES Cope. Type *S. vittatus* Cope.

Cope, E. D. 1883 L, 146.
Hay, O. P. 1902 A, 395 (Rutilus).
Cockerell, T. D. A. 1909 C, 217 (Myloleucus).
1913 B, 130.
Cockerell and Allison 1909 A, 161 (Rutilus).
Jordan, D. S. 1910 B, 185 (Rutilus).
1910 C, 634 (Myloleucus).
1919 B, 361.
Jordan and Evermann 1917 A, 112 (Rutilus).
Jordan and Gilbert 1882 A, 244, 287 (Myloleucus).

Siphateles altarcus (Cope).

Hay, O. P. 1902 A, 395 (Rutilus).
Cope, E. D. 1878 II, 125 (Anchybopsis).
Hay, O. P. 1927 D, 242 (Leucus); 243 (Siphateles).
Pleistocene (Fossil Lake); Oregon.

Siphateles gibbarcus (Cope).

Hay, O. P. 1902 A, 395 (Rutilus).
Cope, E. D. 1878 C, 22 (Anchybopsis breviarcus).
1878 II, 125 (Anchybopsis).
Hay, O. P. 1927 D, 242 (Myloleucus); 243 (Siphateles).
Pleistocene (Fossil Lake); Oregon.

Siphateles latus (Cope).

Hay, O. P. 1902 A, 395 (Rutilus).
1927 D, 268 (S. latus); 265 (Anchybopsis fasciolatus. This species?).
Russell, I. C. 1902 A, 56 ("Anchybopsis fasciolatus Cope." Nomen nudum).
Woodward, A. S. 1901 A, 322 (Leucus).
Pleistocene (Idaho); Idaho.

NOTROPIS Raf. Type *N. atherinoides* Raf.

Hay, O. P. 1902 A, 396.
Cockerell, T. D. A. 1909 B, 189 (Notropinæ).
1913 B, 130.
Cockerell and Allison 1909 A, 158, fig. 3.
Cockerell and Callaway 1909 B, 189, 195.
Gill, T. 1907 C, pl. L, fig. 11.

Hubbs, C. L. 1922 A, 360, figs. 1, 4, 5, 7.
1923 A, 208.
Jordan, D. S. 1885 A, 127.
1905 A, ii, 165.
Jordan and Evermann 1896 A, 254.

Notropis angustarcus (Cope).

Hay, O. P. 1902 A, 396.
1927 D, 242 (Cliola).
Hussakof, L. 1908 A, 84, pl. v, figs. 3, 4.
Pleistocene (Lower); Oregon.

RICHARDSONIUS Girard. Type *Abramis balteatus* Baird and Girard.

Unless otherwise indicated the authors as quoted use the name *Leuciscus*.

Girard, C. 1856, Proc. Acad. Nat. Sci. Phila., viii, 201 (Richardsonius).
Hay, O. P. 1902 A, 396.
Agassiz, L. 1836 A, 150.
Arldt, T. 1907 D, 285.
Bronn, H. G. 1848 A, 639.
Cockerell, T. D. A. 1909 C, 216 (Richardsonius).
1911 F, 371.
1913 B, 131 (Richardsonius).
Cockerell and Allison 1909 A, 157, 159.
Eimer, G. H. T. 1901 A, 259.
Fryd, C. 1901 A, 36.
Fuchs, H. 1912 D, 213.
Fulton, T. W. 1906 A, 77, pl. iiiB.
Hase, A. 1907 A, 633.
Hubbs, C. L. 1926 A, 67.
Jordan, D. S. 1905 A, ii, 169, 579.
1907 B, 388.
1910 B, 185, 634 (Richardsonius).
1919 B, 270 (Richardsonius).
Jordan and Evermann 1896 A, 238 (Subg. of Leuciscus).
1917 A, 37, 99.
Jordan and Gilbert 1882 A, 251.
Lucas, F. A. 1900 G, 223.
Owen, R. 1845 B, 147, pl. lvii, fig. 4.
Palacký, J. 1902 B, 149.
Ridewood, W. G. 1904 A, 62.
Woodward, A. S. 1901 A, 305.

Richardsonius arciferus (Cope).

Hay, O. P. 1902 A, 396 (Leuciscus).
1927 D, 265, 268.
Woodward, A. S. 1901 A, 323 (Squalius).
Pleistocene (Idaho); Idaho.

Richardsonius bairdii (Cope).

Hay, O. P. 1902 A, 396 (Leuciscus).
1927 D, 265, 268.
Woodward, A. S. 1901 A, 323 (Squalius).
Pleistocene (Idaho); Idaho.

Richardsonius condonianus (Cope).

Hay, O. P. 1902 A, 395 (Rutilus).
1927 D, 265, 268.
Hussakof, L. 1908 A, 96, pl. v, figs. 7, 8 (Rutilus).
Woodward, A. S. 1901 A, 322 (Leucus).
Pleistocene (Idaho); Idaho.

Richardsonius laminatus (Cope).

Hay, O. P. 1902 A, 396 (Leuciscus).
1927 D, 268.
Woodward, A. S. 1901 A, 323 (Squalius).
Pleistocene (Idaho); Idaho.

Richardsonius posticus (Cope).

Hay, O. P. 1902 A, 396 (Leuciscus).
1927 D, 265, 268.
Woodward, A. S. 1901 A, 323 (Squalius).
Pleistocene (Idaho); Idaho.

Richardsonius reddingi (Cope).

Hay, O. P. 1902 A, 396 (Leuciscus).
1927 D, 265, 268.
Hussakof, L. 1908 A, 80, pl. v, figs. 1, 2 (Leuciscus).
Woodward, A. S. 1901 A, 323 (Squalius).
Pleistocene (Idaho); Idaho.

Richardsonius rosei (Hussakof).

Hussakof, L. 1916 D, 18, fig. 1 (Leuciscus).
Miocene (Tranquille); British Columbia.

Richardsonius turneri (Lucas).

Hay, O. P. 1902 A, 396 (Leuciscus).
Andreae, A. 1904 B, 461 (Leuciscus).
Blake, W. P. 1867 B, 306 ("fish." This species?).
Cockerell, T. D. A. 1914 A, 190.
Eastman, C. R. 1917 A, 292, pl. xviii, fig. 4 (Leuciscus).
Jordan, D. S. 1905 A, ii, 175 (Leuciscus).
Lucas, F. A. 1900 G, 223, pl. xxxi (Leuciscus).
Merrill, G. P. 1907 A, 13 (Leuciscus).
Sauvage, H. E. 1901 G, 81 (Leuciscus).
Woodward, A. S. 1901 A, 311 (Leuciscus).
Miocene (Esmeralda); Nevada.

MYLOCYPRINUS Leidy. Type *M. robustus* Leidy.

Hay, O. P. 1902 A, 396.
Woodward, A. S. 1901 A, 323 (=Mylopharyngodon).

Mylocyprinus inflexus Cope.

Hay, O. P. 1902 A, 396.
1927 D, 265, 268.
Hussakof, L. 1908 A, 82, pl. v, figs. 11, 12.
Woodward, A. S. 1901 A, 322.
Pleistocene (Idaho); Idaho.

Mylocyprinus robustus Leidy.

Hay, O. P. 1902 A, 396.
1927 D, 104.
1927 D, 268 (Siphateles r. robustus; S. r. longidens; S. r. kingi).
Hussakof, L. 1908 A, 82, pl. v, figs. 9, 10.
Merrill, G. P. 1907 A, 13 (M. robustus, M. kingii).
Woodward, A. S. 1901 A, 322.
Pleistocene (Idaho); Idaho.

ALISODON Hay. Type *A. mirus.*

Hay, O. P. 1920 B, 132.

Alisodon mirus Hay.

Hay, O. P. 1920 B, 132; pl. ix, figs. 8, 9.
1924 D, 247.
Pleistocene; Texas.

COBITIDÆ Swainson.

Swainson, W. 1838 A, i, 231.
Allis, E. P. 1909 A, 213 (Cobitis).
Arldt, T. 1923 A, 507 ("cobitinen").
Bloch, L. 1916 A, 136 ("cobitiden").
Boulenger, G. A. 1904 D, 582 (Cobitidinæ).
Chranilov, I. 1925 A, 90, fig. 18.
1926 A, 49.
Cockerell, T. D. A. 1913 B, 140.
Cope, E. D. 1871 T, 454.
Dean, Gudger, Henn 1923 A, 364, 381, 612.
Frost, G. A. 1925 A, 559.
Geoffrey-St. Hilaire, E. F. 1824 G, 439 (Cobitis).
Gill, T. 1861 B, 7 (Cobitoidæ).
1885 C, 125.
1905 G, 196 ("cobitids").
Goodrich, E. S. 1909 A, 376 (Cobitidinæ).
Günther, A. C. 1868 A, 344 (Cobitidina).
Jordan, D. S. 1885 A, 125.
1923 A, 144.
Klaatsch, H. 1890 A, 156, 169, pl. viii (Cobitis).
Klein, E. F. 1881 A, 325 (Cobitis).
1885 A, 177.
1886 A, 262, 263.
Meek, A. 1916 A, 176 (Cobitidinæ).
Owen, R. 1848 B, 92, 98, pl. i, fig. 7 (Cobitis).
Rauther, M. 1913 A, 1101 (Cobitidinæ).
Regan, C. T. 1911 F, 30.
1922 A, 205.
Sagemehl, M. 1891 A ("cobitiden").
Schelaputin, G. 1906 A, 97.
Sörensen, W. 1894 A, 111 (Cobitini).

COBITIS Linnæus. Type *Cobitis tænia* Linn.

Linnæus, C. 1858 A, 303.
Allis, E. P. 1909 A, 213.
Arldt, T. 1923 A, 507.
Bloch, L. 1916 A, 136, pls. v, vi.
Chranilov, I. 1925 A, 90, figs. 3, 5, 6, 15, 16.
Dean, Gudger, Henn 1923 A, 675.
Günther, A. C. 1868 A, 362.
Hasse, C. 1873 A, 585, figs. 7, 8.
Jordan, D. S. 1885 A, 126, fig. 83.
Jordan and Evermann 1917 A, 14.
Owen, R. 1848 B, 92, 98, pl. i.
Reissner, E. 1859 B, 430.
Sagemehl, M. 1891 A.
Stannius, H. 1854 A, 64.
Woodward, A. S. 1901 A, 320.
Zittel, K. A. 1890 A, 284.

Cobitis sp. indet.

Cope, E. D. 1883 L, 161 (This genus?). Pleistocene (Idaho); Idaho.
Hay, O. P. 1927 D, 265, 268. Pleistocene (Idaho); Idaho.

Suborder SILURIFORMES, new name.

Unless otherwise indicated, the authors, as cited, use the name Nematognathi.
Hay, O. P. 1902 A, 381.
Agassiz, L. 1844 D, 139 ("cycloïdes").
1844 E, 332 ("cycloïdes").
1868 A, 354 ("siluroids").
Bridge, T. W. 1878 A, 705 (Siluroidei).
Cope, E. D. 1871 T, 452, 453.
1891 N, 22.
Dean, Gudger, Henn 1923 A, 637.
Eigenmann, C. H. 1890 B, 10.
Fitzinger, L. J. 1873 A, 44 (Siluri).
Gill, T. 1885 C, 110.
Goetsch, W. 1920 A, 501 ("siluroiden").
Gregory, W. K. 1907 D, 450, 475.
Huxley, T. H. 1858 D, 520 (Siluroidei).
Jordan, D. S. 1885 A, 110 (Nematognathi).
1903 A, 136.
1905 A, ii, 177, 582.
1907 B, 396, 764.
1923 A, 145.
Jordan and Gilbert 1882 A, 95.
Lönnberg, E. 1902 A (Siluroidei).
Regan, C. T. 1909 B, 77 (Siluroidei).
1911 F, 14 (Siluroidea).
1911 G, 553 ("siluroids").
1922 A, 203 (Siluroidea).
Starks, E. C. 1904 C, 254 (Nemotognathi).
1926 A, 88.
Woodward, A. S. 1901 A, ix, 296 (Ostariophysi, in part).
Wright, R. R. 1885 A, 107.
Zittel and Schlosser 1923 A, 124 (Siluroidei).

Superfamily SILUROIDÆ, Sörensen.

Sörensen, W. 1894 A, 109.
Bassoli, G. G. 1906 A, 37, pl. i (otoliths).
Chranilov, I. 1926 A, 49 (Siluroidei).
Gill, T. 1873 F, 11 (Siluroidea).
Norman, E. W. 1926 A, 414 (Siluroidea).
Peyer, B. 1922 A, 536 (Siluroidea).
Reissner, E. 1859 B, 421 ("siluroiden").
Sörenson, W. 1895 A, 205, 518.
1897 A, 172.
Steinmann, G. 1927 A, 80 ("siluroiden").

SILURIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 95, 114.
Hay, O. P. 1902 A, 382.
Abel, O. 1912 F, 565.
1922 F.
Adloff, P. 1920 A, 175 ("welse").
Agassiz, L. 1835 B, 331.
1836 A, 150.
1844 D, 142 ("siluroïdes").
1845 C, 325 (Siluri).
1858 A, 9 ("catfish").
Aichel, O. 1919 A, 81 ("welse").
Allis, E. P. 1905 A, 420.
1909 A, 214.
1918 A, 242.
1922 B, 244.
Arldt, T. 1907 D, 681.
1912 A, 679.
1923 A, 510 ("siluriden").
Baraldi, G. 1877 A, 44 (Siluri).
Belling, D. E. 1912 A, 60 ("siluroiden").
Bliss, R. 1875 A, 386 ("siluroids").
Bonaparte, C. L. 1833 B, 1200.
1838 B, 131.
Boulenger, G. A. 1901 D, 131, 237.
1902 B, 301.
1904 A, 166.
1904 D, 586, 756.
1917 B, 329.
1918 B, 199 ("silurides").
Brauer, A. 1914 A, 284.
Bridge, T. W. 1878 A, 705 ("siluroids").
1896 A, 550.
Bridge and Haddon 1893 A, 65-333.
Carus, V. 1875 A, 556 (Siluroidei).
Collinge, W. E. 1895 B, 275.
Cope, E. D. 1871 T, 454.
Cunningham, J. T. 1912 A, 247, 258, 265.
Cuvier, G. 1805 A ("silures").
1815 A, 113 ("silures").
Davis, J. W. 1880 C, 67 ("siluroids").
Dean, Gudger, Henn 1923 A, 701.
Duméril, A. 1856 A, 471 ("siluroïdes").
Eastman, C. R. 1912 B, 372.
1917 A, 293.
Egerton, P. G. 1852 C, 6 L, 1 ("siluroids").
Eigenmann, C. H. 1890 B, 12.
Geoffroy-St. Hilaire, E. F. 1807 B, 426 ("silures").
1824 A, 132 ("silures").
1824 G, 439 (Silurus).
Gill, T. 1885 C, 115.
1905 C, 617 ("silurids").
Goetsch, W. 1915 A, 461 ("siluriden").
Goodrich, E. S. 1904 A, 474 ("siluroids").
1909 A, 379.
Günther, A. C. 1887 A, 67.
Hamburger, R. 1904 A, 75 ("siluroiden").
Heckel, J. 1850 B, 146 ("siluroiden").
Heilprin, A. 1887 A, 68, 80, 89.
Hoernes, R. 1886 A, 531 (Siluridei).
Hofer, B. 1890 A, 105 ("siluroiden").
Hoffmann, K. 1923 A, 113, fig. 1 (Silurus).
Huxley, T. H. 1859 H, 37 (Siluroidei).
1863 F, 427 ("siluroids").
Hyrtl, C. J. 1862 A, 95 ("siluroiden").
Ihering, H. 1891 C, 26 ("siluriden").
Jaeckel, O. 1904 A, 30 ("siluriden").
Jaquet, M. 1898 A, 101, 213, pls. i-xiii, xvi-xxii (Silurus).
1899 A, 177, pls. xxxiv-xl.
Jordan, D. S. 1885 A, 112.
1905 A, II, 178, 592.
1907 B, 397.
1923 A, 147 (Siluridæ, Ameiuridæ).
Jordan and Gilbert 1882 A, 96.
Kindred, J. E. 1919 A.
1924 A, 423 ("siluroids").
Klein, E. F. 1879 A, 123.
1881 A, 330.
1884 A, 133, 135, 137, 138, 146, 156, 160, 201, 202, 244, 246, 248.
1885 A, 108, 121, 130, 142, 164, 192, 210.
1886 A, 227, 264, 289.
Kner, R. 1861 A, 308 (Siluroidei).
Köstlin, O. 1844 A ("siluroiden").
Koschkaroff, D. N. 1906 A, 211.
Leunis and Ludwig 1883 A, 720.
Leriche, M. 1900 A, 179.
1901 B, 165 ("siluridés").
Mayer, A. F. 1862 A, 108 (Silurus).
McMurrich, J. P. 1883 A, 629 ("siluroids").
Meckel, J. F. 1825 A ("siluren").
Meek, A. 1916 A, 169.
Müller, J. 1845 A, 96 ("siluroiden").
Neumayer, L. 1913 A, 251 ("siluriden").
Owen, R. 1845 B, 86 ("siluroids").
1848 B, 151, pl. i (Silurus).
1866 A, 193, 248.
Palacký, J. 1902 B, 141 ("siluriden").
Parker and Bettany 1877 A, 84 ("siluroids").
Peyer, B. 1919 A, 63 ("welse").
1920 B, 107 ("welse").
1922 A ("siluriden").
Priem, F. 1906 B, 277, figs. 46-48.
1908 B, 99 ("siluridés").
Rauther, M. 1913 A, 1101.
Reed, H. D. 1924 A, 431 ("siluroids").
Regan, C. T. 1911 G, 560 (Siluridæ); 562 (Amiuridæ).
1922 A, 203 (Siluridæ, Amiuridæ).
1924 A, 175 ("siluroids").
Reis, C. 1905 A, 220 ("siluroides").
Reynolds, S. H. 1897 A, 105, 554 ("siluroids").
Richardson, J. 1836 A, 132 (Siluroideæ).
Ridewood, W. G. 1904 B, 213 ("siluroids").
Sagemehl, M. 1883 A ("siluriden").
Scharff, R. F. 1911 A, 89 ("cat-fishes").
Schauinsland, H. 1906 A, 474 ("siluroiden").
Schelaputin, G. 1906 A, 85 (Clarias).
Schlosser, M. 1917 A, 142, 144 ("siluriden").
Shepherd, C. E. 1913 A, 140.
1916 A, 178.
Siebenrock, F. 1901 A, 108.
Sörensen, W. 1895 A, 399 (Siluroidæ).
Starks, E. C. 1905 A, 755 (Silurus).
Stensiö, E. A. 1925 A, 36 (Siluroidæ).
Storms, R. 1891 A, 118 ("siluroides").
Stromer, E. 1925 B, 364.
Terra, P. 1911 A, 212.
Thilo, O. 1879 A, 12, pl. i (Pimelodus).
1898 B, 89 ("siluroiden").
1908 A, 777, 788.

Tomes, C. S. 1878 A, 41 ("siluroids").
Uhlmann, E. 1921 A, 302, 333.
Vaillant, L. 1896 A, 275 ("siluroïdes").
Wagner, R. 1843 A (Silurus).
Wallace, A. R. 1876 A, ii, 441.
Weber, E. H. 1821 A, 1061 (Silurus).
Whitehouse, R. H. 1910 B, 600.
Wiedersheim, R. 1880 C, 128 ("siluroiden").
Woodward, A. S. 1901 A, x, 324.
Wright, R. R. 1885 A, 107.
Zittel and Koken 1911 A, 123.
Zittel and Schlosser 1923 A, 124.
Zittel and Woodward 1902 A, 101.

RHINEASTES Cope. Type *R. peltatus* Cope.

Hay, O. P. 1902 A, 382.
Arldt, T. 1923 A, 512 (Rhineaster).
Cockerell, T. D. A. 1908 C, 163.
Dall and Harris 1892 A, 289.
Eastman, C. R. 1917 A, 294.
Jordan, D. S. 1923 A, 146 (To Ariidae).
Leriche, M. 1901 B, 170.
Matthew, W. D. 1915 A, 298.
Regan, C. T. 1922 A, 206.
Seeley, H. G. 1886 A, 412.
Woodward, A. S. 1901 A, 329.
Zittel and Schlosser 1923 A, 124 (Rhineastes, Astephus).

Rhineastes arcuatus Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1908 C, 163.
Merrill, G. P. 1907 A, 16 (Pimelodus antiquus); 17 (R. arcuatus).
Woodward, A. S. 1901 A, 329.
Middle Eocene (Bridger); Wyoming.

Rhineastes calvus Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1908 C, 163.
Cope, E. D. 1874 B, 441.
Merrill, G. P. 1907 A, 17.
Regan, C. T. 1922 A, 206.
Woodward, A. S. 1901 A, 329.
Middle Eocene (Bridger); Wyoming.

Rhineastes pectinatus Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1906 A, 163.
1908 C, 163.
Merrill, G. P. 1907 A, 17.
Regan, C. T. 1922 A, 206.
Woodward, A. S. 1901 A, 329.
Miocene (Florissant); Colorado.

Rhineastes peltatus Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1908 C, 163.
Jordan, D. S. 1905 A, ii, 186.
1907 B, 405.
Merrill, G. P. 1907 A, 17.
Woodward, A. S. 1901 A, 329.
Middle Eocene (Bridger); Wyoming.

Rhineastes radulus Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1908 C, 163.
Merrill, G. P. 1907 A, 18.
Woodward, A. S. 1901 A, 330 (Rhineastes?).
Middle Eocene (Bridger); Wyoming.

Rhineastes rhæas Cope.

Hay, O. P. 1902 A, 382.
Lambe, L. M. 1904 C, 27, 38, 44.
1908 A, 9, 14, pl. i, figs. 10-16.
Woodward, A. S. 1901 A, 329 (Rhineastes?).
Oligocene; Assiniboia.

Rhineastes smithii Cope.

Hay, O. P. 1902 A, 382.
Cockerell, T. D. A. 1908 C, 163.
Merrill, G. P. 1907 A, 18.
Woodward, A. S. 1901 A, 330.
Middle Eocene (Bridger); Wyoming.

Rhineastes sp. indet.

Bowen, C. F. 1915 A, 118. Upper Cretaceous (Hell Creek); Montana.
Brown, B. 1907 A, 842. Upper Cretaceous (Hell Creek); Montana.

AMEIURUS Rafinesque. Type *Pimelodus cupreus* Raf. = *A. natalis* Le Sueur.

Unless otherwise indicated, the authors, as quoted, use the name *Amiurus*.
Hay, O. P. 1902 A, 382 (Ameiurus).
Allis, E. P. 1897 A, 15.
1898 A, 428.
1905 A, 402, 420 (Ameiurus).
1909 A, 213 (Ameiurus).
1915 A, 556 (Ameiurus).
1918 A, 242 (Ameiurus).
1919 C, 254 (Ameiurus).
1922 A, 153.
1922 B, 197.
1923 A, 43.
Arldt, T. 1907 D, 96.
1923 A, 512.
Braus, H. 1906 A, 184.
Bridge, T. W. 1896 A, 553.
1904 A, 730.
Bridge and Haddon 1893 A, 81, 112, 275, 289.
Collinge, W. E. 1895 B, 278, pl. xvii, figs. 2, 3.
Dall and Harris 1892 A, 289.
Dean, Gudger, Henn 1923 A, 668.
Duméril, A. 1856 A, 486 ("pimélode").
Eastman, C. R. 1917 A, 293 (Ameiurus).
Gill, T. 1885 C, 117.
Goodrich, E. S. 1909 A, 379.
Günther, A. C. 1887 A, 68.
Hague, F. 1924 A, 275 (Amiurus).
Heilprin, A. 1887 A, 68.
Hilgard, T. C. 1858 A, 91 (Pimolodus).
Jordan, D. S. 1885 A, 116 (Amiurus).
1905 A, ii, 180, 556 (Ameiurus).
1907 B, 399 (Ameiurus).
Jordan and Evermann 1917 A, 112 (Ameiurus).
Jordan and Gilbert 1882 A, 102.
Kindred, J. E. 1919 A, 1-104, pls. i-viii.
Kingsley, J. S. 1925 A, 91, 94, 95, 111, figs. 96, 99-101, 116, 251.

Kolzoff, N. K. 1896 A, 519.
Leriche, M. 1901 B, 170, 171.
Meek, A. 1916 A, 170, 171.
Moodie, R. L. 1915 J, 326.
1922 B, 322, fig. 2.
Norman, E. W. 1926 A, 402, fig. 50.
Peyer, B. 1922 A, 495, fig. 30.
Reed, H. D. 1924 A, 431, fig. 1.
Regan, C. T. 1922 A, 207.
Reis, C. 1905 A, 224, pl. vi.
Ryder, J. 1886 A, 73, 80.
Scharff, R. F. 1911 A, 89 (Ameiurus).
Schmalhausen, J. J. 1912 A, 549.
Starks, E. C. 1916 A, 21.
Wallace, A. R. 1876 A, ii, 442.
Woodward, A. S. 1901 A, 328.
Wright, R. R. 1885 A, 107, 110.

Ameiurus cancellatus Cope.

Hay, O. P. 1902 A, 383.
Lambe, L. M. 1904 C, 27, 38, 44 (Amiurus).
1908 A, 9, 15 (Amiurus).
Woodward, A. S. 1901 A, 328 (Amiurus).
Oligocene (White River): Assiniboia.

Ameiurus? decorus Hay.

Hay, O. P. 1924 A, 1, pl. i, fig. 1.
Upper Miocene (Fleming); Texas.

Ameiurus maconnellii Cope.

Hay, O. P. 1902 A, 383.
Lambe, L. M. 1904 C, 27, 44 (Amiurus).
1908 A, 9, 16 (Amiurus).
Oligocene (White River): Assiniboia.

Ameiurus nebulosus (Le Sueur).

Le Sueur, C. A. 1819, Mem. Mus., v, 149 (Pimelodus).
Hay, O. P. 1923 A, 311.
Jordan and Evermann 1896 A, 140.
Leidy, J. 1889 H, 19 (Amiurus atrarius).
Recent; Eastern United States: Pleistocene; Pennsylvania.

Ameiurus primævus Eastman.

Eastman, C. R. 1917 A, 293. Origin uncertain; probably from Eocene (Green River); Wyoming.

Ameiurus sp. indet.

Cope, E. D. 1883 L, 161. Pleistocene (Idaho); Idaho.
Hay, O. P. 1927 D, 265, 268.
Matthew, W. D. 1918 A, 188. Pliocene (Snake Creek); Nebraska.
1924 C, 68 (This genus?). Upper and Middle Miocene (Lower Snake Creek and Sheep Creek); Nebraska.

Order ANGUILLOMORPHI, new name.

Unless otherwise indicated, the writers, as cited, employ for this order the name *Apodes.*
Arldt, T. 1923 A, 514 ("apoden").
Bonaparte, C. L. 1831 A, 96.
Boulenger, G. A. 1904 A, 162, 167.
1904 D, 599.
Cockerell, T. D. A. 1913 B, 126 (Enchelycephali).
Cope, E. D. 1872 C, 334 (Enchelycephali).
Cunningham, J. T. 1912 A, 167 (Apoda).
Cuvier, G. 1814 A, 76 ("anguilles").
Dean, Gudger, Henn 1923 A, 669.
Dietz, P. A. 1917 A, 84.
Gill, T. 1872 C, 19.
1885 C, 100.
1909 B, 836.
1909 C, 789.
1910 C, 789.
Goodrich, E. S. 1909 A, 397, 403 (Anguilliformes).
Gregory, W. K. 1907 D, 450, 478.
Hasse and Schwarck 1870 A, 30 ("aale").
Jordan, D. S. 1885 A, 100.
Jordan, D. S. 1905 A, I, 611; II, 139.
1907 B.
1923 A, 129.
Jordan and Evermann 1896 A, 344.
Kesteven, H. L. 1926 A, 133.
Kner, R. 1861 A, 233.
Linnæus, C. 1758 A, 242, 244.
Meek, A. 1916 A, 148.
Moodie, R. L. 1909 D, 243 (Apoda).
Owen, R. 1866 A, 40.
Popta, Canna M.-L. 1904 A, 367 (Murænidæ).
Rauther, M. 1913 A, 1101.
Regan, C. T. 1909 B, 78 (Anguiloidei); 83 (Apodes).
1912 B, 839, 841, 843.
1912 D, 377.
Stannius, H. 1854 A.
Woodward, A. S. 1898 A, 119.
1901 A, 336.
Zittel and Koken 1911 A, 119.
Zittel and Schlosser 1923 A, 133 (Anguilliformes).

Suborder ARCHENCHELI Jordan.

Jordan, D. S. 1905 A, ii, 141.
Goodrich, E. S. 1909 A, 404.
Gregory, W. K. 1907 D, 481.
Jordan, D. S. 1905 A, ii, 141.
Jordan, D. S. 1907 B, 364.
1923 A, 139.
Norman, E. W. 1926 A, 369-464, fig. 1 (Anguilla).

ANGUILLAVIDÆ Hay.

Hay, O. P. 1903 I, 436.
Gregory, W. K. 1907 D, 480.
Jordan, D. S. 1923 A, 130.
Regan, C. T. 1909 B, 83.
1912 D, 379, 380 (Urenchelidæ).

ANGUILLAVUS Hay. Type *A. quadripinnis* Hay.

Hay, O. P. 1903 I, 437.
Arldt, T. 1923 A, 514.
Regan, C. T. 1912 D, 380.

Anguillavus hackberryensis Martin.

Martin, H. T. 1822 A, 95.
Cretaceous (Niobrara); Kansas.
A fish of doubtful relationship and not well illustrated.

Suborder COLOCEPHALI Cope.

Cope, E. D. 1871 T, 452, 456.
1872 C, 328, 334.
1891 N, 23.
Gill, T. 1872 C, 20.
1885 C, 101.
Goodrich, E. S. 1909 A, 407.
Gregory, W. K. 1907 D, 481.
Jordan, D. S. 1885 A, 101.
1905 A, II, 152.
1907 B, 371.
1921 A, 352.
1923 A, 133, 157.
Jordan and Evermann 1896 A, 346, 388.
Jordan and Gilbert 1882 A, 354.

MURÆNIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 96, 118.
Allis, E. P. 1907 A, 572.
1909 A, 214.
Arldt, T. 1907 D, 666.
Boulenger, G. A. 1904 A, 161.
1904 D, 604.
Cope, E. D. 1871 T, 456.
1872 C, 335.
1891 N, 23.
Dean, Gudger, Henn 1923 A, 690.
Facciola, L. 1901 A, 41 ("murenoidi").
Gill, T. 1872 C, 20.
1885 C, 107.
1890 B, 157.
1890 C, 165.
Goodrich, E. S. 1909 A, 408.
Gregory, W. K. 1907 D, 481.
Günther, A. C. 1870 A, 19.
1880 A, 669.
Hasse and Schwarck 1870 A, 46 (Muræna).
Huxley, T. H. 1859 D (Muræna).
Jordan, D. S. 1885 A, 107.
1905 A, II, 152.
1907 B, 371.
1921 A, 252.
1923 A, 133.
Jordan and Evermann 1896 A, 346, 388.
Jordan and Gilbert 1882 A, 355.
Kesteven, H. L. 1926 A, 133.
Klein, E. F. 1879 A, 69, 113 (Muræna).
1884 A.
1885 A.
1886 A.
Kner, R. 1861 A, 233 (Murænoidei).
Owen, R. 1845 B, 164, pl. lvi, figs. 4, 5 (Muræna).
1848 B, 91,108.
Popta, C. M. L. 1904 A, 367, figs.
Porta, A. 1905 A, 236 (Murænoidei).
Priem, F. 1914 B, 249 ("murænide," "otolithus").
Regan, C. T. 1912 D, 379.
Sagemehl, M. 1883 A ("muræniden").
1884 A, 22 ("muræniden").
Schlosser, M. 1917 A, 142, 147 ("murænidlen").
Stannius, H. 1854 A, 96 (Murænoidei).
Terra, P. 1911 A, 208.
Versluys, J. 1925 A, 166 ("murænen").
Woodward, A. S. 1901 A, 336.
Zittel, K. A. 1890 A, 285.
Zittel and Koken 1911 A, 127.
Zittel and Schlosser 1923 A, 133.

DEPRANDUS Jordan and J. Z. Gilbert. Type *D. lestes* Jordan and Gilbert.

Jordan and Gilbert, in Jordan, D. S. 1921 A, 252.
Jordan, D. S. 1923 A, 134.

Deprandus lestes Jordan and Gilbert.

Jordan and Gilbert, in Jordan, D. S. 1921 A, 252, pl. ix, fig. *b;* pl. xxx, fig. *b*.
Jordan, D. S. 1924 B, 49, pl. L.
Miocene (Monterey); California.

DERRHIIDÆ Jordan.

Jordan, D. S. 1925 B, 15.

DERRHIAS Jordan. Type *D. enantius* Jordan.

Jordan, D. S. 1925 B, 15.
The relationships of the genus *Derrhias* are regarded by Jordan as forming a distinct puzzle.

Derrhias enantius Jordan.

Jordan, D. S. 1925 B, 15, pls. v, vi.
Miocene (Monterey); California.

Order ISOSPONDYLI Cope.

Hay, O. P. 1902 A, 383.
Agassiz, L. 1835 I, 99 ("cycloidians").
1840 C, 98 ("cycloïdes").
1844 D, 139 ("cycloïdes").
1844 E, 332 ("cycloids").
1845 C, 323 ("cycloids").
Boulenger, G. A. 1902 C, 389.
1904 D, 543 (Malacopterygii).
Cockerell, T. D. A. 1913 B, 122.
Cope, E. D. 1871 T, 452.
1891 N, 22, 23.
Dean, Gudger, Henn 1923 A, 625.
Dietz, P. A. 1917 A, 83 ("physostomen").
Eastman, C. R. 1905 A, 56.
1908 A, 64.
1912 A, 228.
Fowler, H. W. 1911 A, 151.
Gill, T. 1885 C, 134.
Goodrich, E. S. 1904 A, 494.
1909 A, 386 (Clupeiformes).
Gregory, W. K. 1907 D, 449, 467.
1923 A, 238.
Hubbs, C. L. 1919 B, 61, 63.
Jordan, D. S. 1885 A, 134.
Jordan, D. S. 1904 A, 598.
1905 A, II, 37, 576.
1907 B, 264, 265, 761.
1923 A, 116.
Jordan and Gilbert 1882 A, 256.
Klein, E. F. 1884 A, 130, 135, 145, 156 (Physostomi).
Müller, J. 1846 C, (Physostomi, in part).
Parker and Haswell 1897 A, 204 (Physostomi, part).
Regan, C. T. 1909 B, 77, 82.
1923 B, 460.
Ridewood, W. G. 1904 A, 57 ("isospondylous fishes").
Schlesinger, G. 1909 A, (147, 151) (Isospondili).
Starks, E. C. 1904 C, 254.
Stensiö, E. A. 1925 A, 120.
Traquair, R. H. 1900 C, 508.
Woodward, A. S. 1901 A, vi, 1.
1906 C, 281.
1922 C, 94.
Zittel and Koken 1911 A, 118 (Physostomi).
Zittel and Schlosser 1923 A, 124 (Physostomi, in part).

Suborder CLUPEIFORMES Goodrich.

Goodrich, E. S. 1909 A, 386.
Jordan, D. S. 1923 A, 119 (Clupeioidei).
Zittel and Schlosser 1923 A, 124.

Superfamily PHOLIDOPHOROIDÆ, new form.

Gregory, W. K. 1923 A, 238 (Pholidophoroidea).
Jordan, D. S. 1923 A, 116 (Pholidophoroidei).
Regan, C. T. 1923 B, 459 (Halecostomi).

PHOLIDOPHORIDÆ Woodward.

Woodward, A. S. 1890 D, 43.
Hay, O. P. 1902 A, 383.
Abel, O. 1906 C, 84.
1919 A, 208.
1922 A, 77.
Arldt, T. 1923 A, 496 ("pholidophoriden").
Boulenger, G. A. 1904 A, 163.
1904 D, 545.
Deecke, W. 1926 A, 188 ("pholidophoriden").
Goodrich, E. S. 1904 A, 494.
1909 A, 336.
1913 A, 80.
Gregory, W. K. 1923 A, 238, 241.
Jordan, D. S. 1905 A, ii, 26, 586.
1907 B, 761.
Jordan, D. S. 1923 A, 116.
Meek, A. 1916 A, 62.
Priem, F. 1908 B ("pholidophoridés").
Regan, C. T. 1910 A, 354.
1923 B, 458.
Schlosser, M. 1917 A, 135, 136, 138 ("pholidophoriden").
Stensiö, E. A. 1925 A, 119 ("pholiphorids").
Stolley, E. 1920 A, 76, 79.
Traquair, R. H. 1900 C, 508.
Vetter, B. 1881 A, 55 (Pholidophori).
Woodward, A. S. 1915 B, lxxiv.
Zittel and Koken 1911 A, 110.
Zittel and Schlosser 1923 A, 111.
Zittel and Woodward 1902 A, 84.

PHOLIDOPHORUS Agassiz. Type *P. macrocephalus* Agassiz.

Hay, O. P. 1902 A, 383.
Abel, O. 1919 A, 211, fig. 165.
1921 A, 211, fig. 72.
Agassiz, L. 1832 A, 145.
1833 A, 475.
1844 C, 265.
Alessandri, G. 1910 A, 125.
Arldt, T. 1923 A, 496.
Bronn, H. G. 1848 B, 967.
1849 A, 660.
Cross, W. 1908 A, 107.
Cross and Howe 1905 A, 486.
Deecke, W. 1913 A, 80, 81.
Eastman, C. R. 1917 A, 278.
Egerton, P. G. 1852 C, 6 E, 1, pls. iv, v.
1855 A, 8 E, 1, pls. iv, vii.
Giebel, C. G. 1855 A, 113.
Goodrich, E. S. 1908 A, 769.
Heckel, J. J. 1850 A, 361, 365.
Hussakof, L. 1916 C, 348.
Jordan, D. S. 1905 A, II, 28, 586.
Jordan and Evermann 1917 A, 140.
Klaatsch, H. 1890 A, 144.
Lütken, C. 1868 C.
Meek, A. 1916 A, 63.
Priem, F. 1908 B, 16, pl, i, fig. 3.

Priem, F. 1912 B, 251.
Ridewood, W. G. 1904 A, 69.
Scupin, H. 1896 A, 169, pl. x, fig. 4.
Steinmann, G. 1907 A, 413.
1927 A, 13.
Stolley, E. 1920 A, 76.
Stromer, E. 1925 B, 358.
Traquair, R. H. 1911 A, 43.
Vetter, B. 1881 A, 58-72.
Winckler, T. C. 1871 B, 184.
Woodward, A. S. 1891 G, 545.
1897 E, 150, pl.
1906 C, 280.
Woodward, A. S. 1919 A (1918), 101, pl. xx; text-fig. 34.
Zittel and Koken 1911 A, 110.
Zittel and Schlosser 1923 A, 111, figs. 191, 192.
Zittel and Woodward 1902 A, 85.

Pholidophorus americanus Eastman.

Hay, O. P. 1902 A, 383.
Gilmore, C. W. 1905 A, 80.
Jordan, D. S. 1905 A, ii, 28.
Merrill, G. P. 1907 A, 15.
Sauvage, H. E. 1900 B, 116.
Jurassic ("basal"); South Dakota.

LEPTOLEPIDÆ.

Arldt, T. 1923 A, 497 ("leptolepididen").
Boulenger, G. A. 1904 A, 163.
Bridge, T. W. 1904 A, 546.
Cockerell, T. D. A. 1919 A, 173.
Goodrich, E. S. 1909 A, 371.
Jordan, D. S. 1905 A, ii, 41.
1907 B, 268.
1923 A, 117.
Nicholson and Lydekker 1889 A, 990 (Leptolepididæ).
Woodward, A. S. 1895 A, 500.
1898 B, 115.
1915 B, lxxiv.
Zittel and Broili 1911 A, 119.
Zittel, Eastman, etc. 1902 A, 93.
Zittel and Koken 1911 A, 119.
Zittel and Schlosser 1923 A, 122.

THRISSOPS Agassiz. Type *T. formosus* Agassiz.

Agassiz, L. 1843 B (1833), ii, pt. 1, 12.
Goodrich, E. S. 1909 A, 371.
Jordan, D. S. 1905 A, ii, 42.
Nicholson and Lydekker 1889 A, 990.
Woodward, A. S. 1895 A, 521.
1898 B, 116.
Zittel, K. A. 1890 A, 272, figs. 280, 281.
Zittel, Eastman, etc. 1902 A, 94.
Zittel and Koken 1911 A, 120, figs. 222, 223.
Zittel and Schlosser 1923 A, 122, figs. 215, 216.

Thrissops sp. indet.

Felix, J. 1891 A, 194, pl. xxx, fig. 10. Lower Cretaceous (Neocomian); Mexico.

Superfamily ELOPOIDÆ, new form.

GANOLYTIDÆ Jordan.

Jordan, D. S. 1921 A, 241.
Jordan, D. S. 1923 A, 118.

ETRINGUS Jordan. Type *E. scintillans* Jordan.

Jordan, D. S. 1907 A, 121.
Arldt, T. 1923 A, 497.
Hubbs, C. L. 1924 A, 177.
Jordan, D. S. 1919 A, 5.
1921 A, 241.
Jordan, D. S. 1919 A, 5, pl. i; pl. iii, fig. 1.
1921 A, 241.
Miocene? (Soledad); California.

Etringus scintillans Jordan.

Jordan, D. S. 1907 A, 121, fig. 17 (not figs. 18, 19).

Etringus sp. indet.

Jordan, D. S. 1907 A, 124. Miocene; California.

GANOËSSUS Jordan. Type *Ganolytes clepsydra* Jordan and Gilbert.

Jordan, D. S. 1920 C, 571.
1921 A, 241.
Jordan, D. S. 1920 C, 571.
1921 A, 241, pl. xvi.
1925 B, 8, 49.
Miocene (Monterey); California.

Ganoëssus clepsydra (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 23, pl. xi, fig. 1 (Ganolytes).

GANOLYTES Jordan. Type *G. cameo* Jordan.

Jordan, D. S. 1919 A, 5, 6.
Hubbs, C. L. 1924 A, 178.
Jordan, D. S. 1921 A, 241.

Ganolytes cameo Jordan.

Jordan, D. S. 1919 A, 5, 6, pl. ii, fig. 3; pl. iv, figs. 1, 2.
Jordan, D. S. 1907 A, 121, figs. 18, 19 (Etringus scintillans?).

Jordan, D. S. 1921 A, 241, pl. xv.
1925 B, 49.

Jordan and Gilbert 1919 A, 24.
Miocene? (Soledad); California.

PACHYRHIZODONTIDÆ Cope.

Hay, O. P. 1902 A, 387.
Boulenger, G. A. 1904 D, 569.
Fowler, H. W. 1911 A, 151 (Rhaphiosauridæ).
Jordan, D. S. 1905 A, ii, 44.
1907 B, 271, 761.
1923 A, 118 (Raphiosauridæ).

PACHYRHIZODUS Dixon. Type *P. basalis* Dixon.

Dixon, F. 1850, Geol. Sussex, 374.
Hay, O. P. 1902 A, 387.
Agassiz, L. 1843 B, (1835) IV, 35 (Megalodon, in part).
1843 B, (1837) Feuill., 104 (Hypsodon, in part).
Boulenger, G. A. 1904 D, 569.
Cockerell, T. D. A. 1919 A, 173, 174.
Cope, E. D. 1880 U, 147.
Dollo, L. 1892 F, 181.
Fowler, H. W. 1911 A, 152 (Syn. of *Raphiosaurus* Owen).
Hay, O. P. 1903 A, 29, 59.
Hennig, E. 1912 A, 490.
Jordan, D. S. 1919 B, 246.
1925 A, 219, 220.
Krause, P. G. 1901 A, 120.
Mason, J. W. 1869, Quart. Jour. Geol. Soc. Lond., xxv, 444 (*Acrodontosaurus*).
Owen, R. 1842 Trans. Geol. Soc. Lond. (2), VI 413 (Raphiosaurus, type *R. subulidens* Owen= Pachyrhizodus?).
Schlosser, M. 1901 L, 480.
Storms, R. 1891 A, 151, 152.
Woodward, A. S. 1889 J, 351 (Pachyrhizodus, Raphiosaurus).
1898 B, 118.
1901 A, 8, 37.
1912 A (1907), 123, pls. xxv, xxvi; (1908), 129, pls. xxvii, xxviii; text-fig. 29.
Zittel and Koken 1911 A, 125.
Zittel and Schlosser 1923 A, 129.

Pachyrhizodus caninus Cope.

Hay, O. P. 1902 A, 387.
1903 A, 60, pl. iii, figs. 1, 2; text-figs. 44, 45.
Hussakof, L. 1908 A, 85.
Priem, F. 1908 B, 66.
Woodward, A. S. 1901 A, 44.
Zittel and Schlosser 1923 A, 129, fig. 226.
Upper Cretaceous (Niobrara); Kansas: Cretaceous; France.

Pachyrhizodus curvatus Loomis.

Hay, O. P. 1902 A, 388.
Woodward, A. S. 1901 A, 44.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus kingii Cope.

Hay, O. P. 1902 A, 388.
Woodward, A. S. 1901 A, 42 (Syn. of P. latimentum).
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus latimentum Cope.

Hay, O. P. 1902 A, 388.
Woodward, A. S. 1901 A, 42.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus leptognathus Stewart.

Hay, O. P. 1902 A, 388.
Woodward, A. S. 1901 A, 45.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus leptopsis Cope.

Hay, O. P. 1902 A, 388.
1903 A, 64.
Hussakof, L. 1908 A, 85.
Woodward, A. S. 1901 A, 45.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus minimus Stewart.

Hay, O. P. 1902 A, 388.
Sauvage, H. E. 1899 C, 150.
Schlosser, M. 1901 L, 480.
Woodward, A. S. 1901 A, 45.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus velox Stewart.

Hay, O. P. 1902 A, 388.
Woodward, A. S. 1901 A, 45.
Upper Cretaceous (Niobrara); Kansas.

Pachyrhizodus sp. indet.

Lambe, L. M. 1914 H, 402. Upper Cretaceous (Niobrara); Wyoming.

ORICARDINUS Cope. Type *O. tortus* Cope.

Hay, O. P. 1902 A, 388.
Hennig, E. 1912 A, 490.
Zittel and Koken 1911 A, 125.

Oricardinus sheareri Cope.

Hay, O. P. 1902 A, 388.
1903 A, 64, text-fig. 46.
Hussakof, L. 1908 A, 84.

Woodward, A. S. 1901 A, 45 (Pachyrhizodus).
Cretaceous (Niobrara); Kansas.

Oricardinus tortus Cope.

Hay, O. P. 1902 A, 388.
1903 A, 65, text-figs. 47, 48, 49?.
Hussakof, L. 1908 A, 84.
Woodward, A. S. 1901 A, 46.
Cretaceous (Niobrara); Kansas.

CONOSAURUS Gibbes. Type *C. bowmani* Gibbes.

Hay, O. P. 1902 A, 388.
Fowler, H. W. 1911 A, 152.

Conosaurus bowmani Gibbes.

Hay, O. P. 1902 A, 388.
Fowler, H. W. 1911 A, 152, fig. 93.
Woodward, A. S. 1901 A, 612 (Conosaurops).
Upper Cretaceous (Greensand); South Carolina, New Jersey: Eocene?; South Carolina.

ELOPIDÆ Richardson.

Richardson, J. 1856 A, 251.
Arldt, T. 1912 A, 762.
1923 A, 497 ("elopiden").
Boulenger, G. A. 1901 D, 46.
1904 D, 544, 546.
Cockerell, T. D. A. 1913 B, 122.
1919 A, 173, 174.
Cope, E. D. 1871 T, 455.
Dean, Gudger, Henn 1923 A, 594, 625.
Gill, T. 1885 C, 137.
1905 F, 31.
Goodrich, E. S. 1909 A, 387.
Heckel, J. J. 1856 A, 250.
Jaekel, O. 1911 A, 89.
Jordan, D. S. 1885 A, 137.
1921 A, 242.
1923 A, 117.
Jordan and Evermann 1896 A, 407.
Jordan and Gilbert 1882 A, 260.
Moodie, R. L. 1911 G, 282.
Owen, R. 1848 B, 69 (Elops).
Regan, C. T. 1910 A, 254.
1923 B, 457.
Ridewood, W. G. 1904 A, 35, 37.
Schlosser, M. 1917 A, 139, 140, 148 ("elopiden").
Shepherd, C. E. 1914 A, 263.
Stromer, E. 1912 A, 33.
Woodward, A. S. 1898 B, 117.
1901 A, vi, 7.
1912 A, (1907), 112.
Zittel, K. A. 1890 A, 278 (Elopina).
Zittel, Eastman, etc. 1902 A, 94.
Zittel and Koken 1911 A, 124.
Zittel and Schlosser 1923 A, 129.

HOLCOLEPIS Marck. Type *Rhabdolepis cretaceus* Marck.

Marck, W. 1868, Palaeontogr., xv, 278 (To replace *Rhabdolepis*, preoccupied).
Cockerell, T. D. A. 1919 A, 173.
Marck, W. 1863 A, 26 (Rhabdolepis).
Jordan, D. S. 1905 A, i, 454, fig. 265; ii, 43.
1907 B, 270, fig. 201.
1919 B, 339, 352.
Woodward, A. S. 1901 A, 11.

Holcolepis delicatus Cockerell.

Cockerell, T. D. A. 1919 A, 175, pl. xxxi, fig. 5.
Upper Cretaceous (Mowry); Wyoming.

Holcolepis obliquus Cockerell.

Cockerell, T. D. A. 1919 A, 175.
Upper Cretaceous (Mowry); Yyoming.

Holcolepis pulchellus Cockerell.

Cockerell, T. D. A. 1919 A, 174, pl. xxi, figs. 3, 4.
Upper Cretaceous (Niobrara or Benton); Colorado.

Holcolepis transversus Cockerell.

Cockerell, T. D. A. 1919 A, 175, pl. xxxi, figs. 6-13.
Upper Cretaceous (Mowry); Wyoming; (Benton); Colorado.

Holcolepis sp. indet.

Cockerell, T. D. A. 1919 A, 175, pl. xxxii, fig. 2 (Colorado beds); Wyoming.
Reeside, J. B. 1924 A, 12, pl. iii. Upper Cretaceous (Mancos); New Mexico.

HELMINTHOLEPIS Cockerell. Type *H. vermiculatus* Cockerell.

Cockerell, T. D. A. 1919 A, 176.

Helmintholepis vermiculatus Cockerell.

Cockerell, T. D. A. 1919 A, 176, pl. xxxii, fig. 4.
Upper Cretaceous (Fox Hills); Colorado.

ECTASIS Jordan and Gilbert. Type *E. proriger* Jord. and Gilbert.

Jordan and Gilbert 1919 A, 62.
Hubbs, C. L. 1924 A, 178.
Jordan, D. S. 1921 A, 242.

Ectasis proriger Jordan and Gilbert.

Jordan and Gilbert 1919 A, 62.
Jordan, D. S. 1921 A, 242, pl. xvii, fig. *a*.
Upper Pliocene; California.

SPANIODONTIDÆ Jordan.

Jordan, D. S. 1905 A, ii, 43.
Jordan, D. S. 1923 A, 117 (To Elopidæ).

SPANIODON Pictet. Type *S. blondelii* Pictet.

Hay, O. P. 1902 A, 391.
Cope, E. D. 1880 U, 147.
Davis, J. W. 1887 C, 593 (Lewisia, type *L. ovalis* Davis).
Hay, O. P. 1903 G, 694.
Hennig, E. 1912 A, 490.
Jordan, D. S. 1923 A, 117.
Woodward, A. S. 1901 A, 48.

Zittel and Koken 1911 A, 125.
1923 A, 129.

Spaniodon simus Cope.

Hay, O. P. 1902 A, 391.
Cockerell, T. D. A. 1919 A, 173.
Hay, O. P. 1903 A, 47, pl. iv, figs. 1, 2.
Hussakof, L. 1908 A, 101.
Woodward, A. S. 1901 A, 53.
Cretaceous (Niobrara); South Dakota.

THRISSOPATER Günther. Type *T. salmoneus* Günther.

Günther, A. C. 1872, figs. Descrip. Brit. Org. Remains, dec. xiii.
Boulenger, G. 1904 D, 562.
Jordan, D. S. 1905 A, ii, 43.
Moodie, R. L. 1911 G, 231.
Woodward, A. S. 1901 A, 32.
1912 A (1908), 136.

Thrissopater intestinalis Moodie.

Moodie, R. L. 1911 G, 281; pl. lxi.
1913 A, 249.
Upper Cretaceous (Niobrara); Texas.

Superfamily ALBULOIDÆ, new name.

PELYCORAPIDÆ Cragin.

Cragin, F. W. 1901 A, 31 (Pelecorapidæ); 25 (Syllæmidæ).
Jordan, D. S. 1925 A, 229, 230 (Syllæmidæ).

SYLLÆMUS Cope. Type *S. latifrons* Cope.

Hay, O. P. 1902 A, 399.
Boulenger, G. A. 1904 D, 565 (Scyllæmus).
Cockerell, T. D. A. 1919 A, 185.
Cragin, F. W. 1901 A, 26.
Goodrich, E. S. 1909 D, 393 (Scyllæmus).
Jordan, D. S. 1925 A, 229.
Woodward, A. S. 1901 A, xi, 350.
1912 A (1903), 88, pls. xx, xxi.

Syllæmus latifrons Cope.

Hay, O. P. 1902 A, 399.
Cockerell, T. D. A. 1908 C, 176.
1914 A, 190.
1919 A, 180.
Cragin, F. W. 1901 A, 27, pl. i, figs.
Cope, E. D. 1877 K, 27, pl. xxiii, fig. 1.
Jordan, D. S. 1905 A, ii, 224.
1907 B, 439.
Merrill, G. P. 1907 A, 20.
Woodward, A. S. 1901 A, 351, 614.
Cretaceous?; New Mexico.

APSOPELIX Cope. Type *A. sauriformis* Cope.

Hay, O. P. 1902 A, 390.
Cockerell, T. D. A. 1919 A, 171, 172, 185.
Jordan, D. S. 1925 A, 229.
Woodward, A. S. 1901 A, 353.

Apsopelix sauriformis Cope.

Hay, O. P. 1902 A, 390.
Cockerell, T. D. A. 1919 A, 185.
Cope, E. D. 1874 B, 431.
Hussakof, L. 1908 A, 62.
Jordan, D. S. 1925 A, 230, pl. xx.
Cretaceous (Benton); Kansas.

PELYCORAPIS Cope. Type *P. varius* Cope.

Cope, E. D. 1874 C, 39 (Pelecorapis, lapsu calami).
Hay, O. P. 1902 A, 399 (Pelecorapis).
Cockerell, T. D. A. 1919 A, 185, 187.
Cragin, F. W. 1901 A, 31, (Pelecorapis).
Jordan, D. S. 1923 A, 157 (Pelycorapis).
1925 A, 229 (Pelocorapis).
Woodward, A. S. 1901 A, 354 (Pelycorapis).

Pelycorapis berycinus (Cope).

Hay, O. P. 1902 A, 399 (Pelecorapis).
Cockerell, T. D. A. 1908 C, 176 (Pelecorapis).
1919 A, 187 (Pelecorapis).
Hussakof, L. 1908 A, 86, fig. 44 (Pelecorapis).
Woodward, A. S. 1901 A, 354.
Upper Cretaceous (Pierre?); Montana?.

Pelycorapis microlepis Cragin.

Cragin, F. W. 1901 A, 35, pl. ii, fig. 3 (Pelecorapis).
Upper Cretaceous (Benton); Kansas.

Pelycorapis varius Cope.

Hay, O. P. 1902 A, 399.
Cockerell, T. D. A. 1919 A, 171, 187.
Cope, E. D. 1874 B, 431 (P. varians).
Cragin, F. W. 1901 A, 32, pl. ii, figs. 1, 2.
Hussakof, L. 1908 A, 87.
Woodward, A. S. 1901 A, 354.
Cretaceous (Benton); Kansas.

LEPTICHTHYS Stewart. Type *L. agilis* Stewart.

Hay, O. P. 1902 A, 392.
Jordan, D. S. 1925 A, 229.

Leptichthys agilis Stewart.

Hay, O. P. 1902 A, 392.
Jordan, D. S. 1925 A, 231, pl. xxi.
Woodward, A. S. 1901 A, 614, 616.
1912 A, (1903), 88.
Upper Cretaceous (Niobrara); Kansas.

ALBULIDÆ Cope.

Cope, E. D. 1871 T, 455.
Hay, O. P. 1902 A, 390.
Allis, E. P. 1909 A, 213 (Albula).
Arldt, T. 1923 A, 497.
Boulenger, G. A. 1904 A, 164.
1904 D, 547.
Cockerell, T. D. A. 1913 B, 122.
1919 A, 172.
Cope, E. D. 1872 C, 329, 333.
Dean, Gudger, Henn 1923 A, 594, 625.
Dietz, P. A. 1917 A, 84.
Frost, G. A. 1925 A, 155, pl. xi (Albula).
Gill, T. 1885 C, 137.
1905 F, 40, pls. xvii, xviii, xxi; text-figs. 5-7.
Goodrich, E. S. 1909 A, 387.
Gregory, W. K. 1907 D, 469.
Hubbs, C. L. 1919 B, 63 (Albula).
Jordan, D. S. 1885 A, 137.
1905 A, ii, 44, 556.
1907 B, 271, 761.
Jordan, D. S. 1923 A, 118.
Jordan and Evermann 1896 A, 410.
Jordan and Gilbert 1882 A, 258.
Klaatsch, H. 1890 A, 168, pl. vii (Albula).
Meek, A. 1916 A, 63.
Priem, F. 1908 B, 81 (Albula).
Rauther, M. 1913 A, 1100.
Regan, C. T. 1910 A, 357.
Ridewood, W. G. 1904 A, 35, 47.
1904 B, 213.
1905 C, 272.
Schlosser, M. 1917 A, 140, 143.
Shepherd, C. E. 1914 A, 264.
Starks, E. C. 1916 A, 14 (Albula).
Woodward, A. S. 1899 C, 361.
1901 A, vi, 4, 59.
1923 B, 297.
Zittel and Koken 1911 A, 121.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 94.

CYCLOIDES Winckler. Type *C. incisus* Winckler.

Winckler, T. C. 1876 A, 3, pl. i, fig. 2.
Cockerell, T. D. A. 1919 A, 173.
Jordan, D. S. 1919 B, 398.

Cycloides? incertus Cockerell.

Cockerell, T. D. A. 1919 A, 173, pl. xxxi, fig. 2.
Upper Cretaceous (Mesa Verde); Wyoming.

PETALOLEPIS Steinla. Type *Osmeroides divaricatus* Geinitz.

Steinla, M. 1868, in Geinitz, H. B. 1868 A, 42, pl. ii, fig. 18 (As syn. of Osmeroides).
Jordan, D. S. 1919 B, 350.

Petalolepis? fibrillatus Cockerell.

Cockerell, T. D. A. 1919 A, 172, pl. xxxi, fig. 1.
Upper Cretaceous (Mesa Verde); Wyoming.

CYCLOTOMODON Cope. Type *C. vagrans* Cope.

Hay, O. P. 1902 A, 390.

Cyclotomodon vagrans Cope.

Hay, O. P. 1902 A, 390.
Woodward, A. S. 1901 A, 45.
Phosphate beds; South Carolina.

ANOGMIIDÆ Jordan.

Jordan, D. S. 1925 A, 219.

ANOGMIUS Cope. Type *A. contractus* Cope.

Cope, E. D. 1871 J, 170.
Hay, O. P. 1902 A, 393.
Arldt, T. 1923 A, 497.
Cockerell, T. D. A. 1919 A, 172.
Cope, E. D. 1877 G, 584.
Hay, O. P. 1903 A, 26, text-figs. 15-17, 33-36 (This genus?).
Hennig, E. 1912 A, 490.
Jordan, D. S. 1919 B, 360, 388.
1925 A, 219 (Thryptodus, Pseudothryptodus, syns.?).
Schlosser, M. 1901 L, 480.
Woodward, A. S. 1901 A, 71, foot-note.
1912 A (1907), 105.
1923 B, 297, fig. 1.
Zittel and Koken 1911 A, 124.
Zittel and Schlosser 1923 A, 129.
This genus may be identical with Pachyrhizodus.

Anogmius contractus Cope.

Hay, O. P. 1902 A, 393 (A. contractus, A. aratus).
1903 A, 28 (A. contractus); 34, pl. ii, text-figs. 23-26 (A. aratus).
Hussakof, L. 1908 A, 61, fig. 30.
Jordan, D. S. 1925 A, 219, 220 (A. aratus, a syn.).
Woodward, A. S. 1901 A, 71 (A. contractus); 72 (A. aratus).
1912 A (1907), 105, fig. 33.
1923 B, 298.
Zittel and Koken 1911 A, 124, fig. 231 (A. aratus).
Zittel and Schlosser 1923 A, 128, fig. 25 (A. aratus).
Upper Cretaceous (Niobrara); Kansas.

Anogmius evolutus Cope.

Hay, O. P. 1902 A, 393.
1903 A, 46, text-fig. 37.
Hussakof, L. 1908 A, 62.
Jordan, D. S. 1925 A, 220, 221.
Woodward, A. S. 1901 A, 72 (Anogmius); 386 (Beryx multidentatus).
Upper Cretaceous (Niobrara); Kansas.

Anogmius favirostris Cope.

Hay, O. P. 1902 A, 393.
1903 A, 30, text-figs. 18-21.
Hussakof, L. 1908 A, 62.
Jordan, D. S. 1925 A, 220.
Woodward, A. S. 1901 A, 73.
Upper Cretaceous (Niobrara); Kansas.

Anogmius intermedius (Loomis).

Hay, O. P. 1902 A, 393.
Jordan, D. S. 1925 A, 219.
Woodward, A. S. 1901 A, 85 (Pseudothryptodus).
Upper Cretaceous (Niobrara); Kansas.

Anogmius polymicrodus (Stewart).

Hay, O. P. 1902 A, 393.
Cockerell, T. D. A. 1919 A, 179.
Hay, O. P. 1903 A, 35.
Jordan, D. S. 1925 A, 219, 220, pl. xiii.
Lambe, L. M. 1914 H, 402.
Sauvage, H. E. 1901 A, 6.
Schlosser, M. 1901 L, 479.
Woodward, A. S. 1901 A, 72.
Upper Cretaceous (Niobrara); Kansas.

Anogmius sp. indet.

Hay, O. P. 1903 A, 27, 30, 44, figs. 15, 17, 33, 34. Upper Cretaceous (Niobrara); Kansas.
Hussakof, L. 1908 A, 62. Upper Cretaceous (Niobrara); Kansas.

PLETHODONTIDÆ Woodward.

Woodward, A. S. 1912 A (1907), 105.
Hay, O. P. 1902 A, 393 (Osteoglossidæ, in part).
Cockerell, T. D. A. 1919 A, 172, 179.
Hay, O. P. 1903 A, 26 (Plethodidæ).
Jordan, D. S. 1905 A, ii, 44 (Thryptodontidæ).
1907 B, 271 (Thryptodontidæ).
1923 A, 119 (Thryptodontidæ).
Jordan, D. S. 1925 A, 220 (Anogmiidæ?).
Loomis, F. B. 1900 A, 229, 233 (Plethodidæ).
Schlosser, M. 1917 A, 140 ("plethodiden").
Woodward, A. S. 1899 C, 353, pls. xiii, xiv (Plethodus).
Zittel and Koken 1911 A, 124 (Plethodidæ).
Zittel and Schlosser 1923 A, 128 (Plethodidæ).

THRYPTODUS Loomis. Type *T. zitteli* Loomis.

Hay, O. P. 1902 A, 393 (Anogmius).
Andreae, A. 1904 A, 309.
Cockerell, T. D. A. 1919 A, 179 (Plethodus).
Jordan, D. S. 1905 A, ii, 44 (Thryptodus, Plethodus).
1907 B, 271 (Thryptodus, Plethodus).
1920 C, 490 (Type "Plethodus zitteli Loomis").
1925 A, 219 (Tyryptodus).
Storms, R. 1891 A, 151 (Plethodus).
Woodward, A. S. 1899 C, 353, pls. xiii, xiv (Plethodus).
1901 A, 85.
1912 A (1907), 107, pl. xxii (Thryptodus, a syn. of Plethodus).
Zittel and Koken 1911 A, 124 (Plethodus).
Zittel and Schlosser 1923 A, 129 (Thryptodus, Plethodus).

Thryptodus rotundus Loomis.

Hay, O. P. 1902 A, 393 (Anogmius).
Woodward, A. S. 1901 A, 85.
Upper Cretaceous (Niobrara); Kansas

Thryptodus zitteli Loomis.

Hay, O. P. 1902 A, 393 (Anogmius).
1903 A, 38, 41, 42.
Jordan, D. S. 1920 C, 490.
1925 A, 219.
Woodward, A. S. 1901 A, 85.
Upper Cretaceous (Niobrara); Kansas.

SYNTEGMODUS Loomis. Type *S. altus* Loomis.

Hay, O. P. 1902 A, 390.
Jordan, D. S. 1905 A, ii, 45.
1907 B, 271.
Woodward, A. S. 1901 A, 84 (Syn. of Plethodus).
Zittel and Koken 1911 A, 124.
Zittel and Schlosser 1923 A, 129.

Syntegmodus altus Loomis.

Hay, O. P. 1902 A, 390.
1903 A, 41, text-figs. 27?-33? (Anogmius).
Hussakof, L. 1908 A, 61 (Anogmius. This species?).
Jordan, D. S. 1905 A, ii, 44.
Woodward, A. S. 1901 A, 84.
Upper Cretaceous (Niobrara); Kansas

NIOBRARIDÆ Jordan.

Jordan, D. S. 1925 A, 222.

NIOBRARA Jordan. Type *N. encarsia* Jordan.

Jordan, D. S. 1925 A, 222.

Niobrara encarsia Jordan.

Jordan, D. S. 1925 A, 223, pl. xiv.
Upper Cretaceous (Niobrara); Kansas.

ZANCLITES Jordan. Type *Z. xenurus* Jordan.

Jordan, D. S. 1925 A, 224.

Zanclites xenurus Jordan.

Jordan, D. S. 1925 A, 224, fig. 15.
Upper Cretaceous (Niobrara); Kansas.

KANSANUS Jordan. Type *K. martini* Jordan.

Jordan, D. S. 1925 A, 226.

Kansanus martini Jordan.

Jordan, D. S. 1925 A, 226, pl. xvi.
Upper Cretaceous (Niobrara); Kansas.

LUXILITES Jordan. Type *L. striolatus* Jordan.

Jordan, D. S. 1925 A, 226.

Luxilites striolatus Jordan.

Jordan, D. S. 1925 A, 227, pl. xvii.
Upper Cretaceous (Niobrara); Kansas.

FERRIFRONS Jordan. Type *F. rugosus* Jordan.

Jordan, D. S. 1925 A, 227.

Ferrifrons rugosus Jordan.

Jordan, D. S. 1925 A, 228.
Upper Cretaceous (Niobrara); Kansas.

PTEROTHRISSIDÆ Gill.

Gill, T. 1893 A, 131.
Cockerell, T. D. A. 1919 A, 172.
Goode and Bean 1895 A, 50.
Jordan, D. S. 1905 A, ii, 44 (Thryptodontidæ); 46 (Pterothrissidæ).
1907 A, 127, fig. 22 ("pterothrissoid fish").
1907 B, 273.
1923 A, 119.

CHICOLEPIS Cockerell. Type *C. punctatus* Cockerell.

Cockerell, T. D. A. 1919 A, 177.

Chicolepis punctatus Cockerell.

Cockerell, T. D. A. 1919 A, 177, pl. xxxiv, fig. 1.
Upper Cretaceous (Chico); California.

Superfamily CLUPEOIDÆ, new form.

Frost, G. A. 1925 A, 153 (Clupeoidea).
Gill, T. 1873 F, 11 (Clupeoidea).
Jordan, D. S. 1905 A, ii, 41 (Clupeoidea).
1907 B, 268 (Clupeoidea).
1923 A, 119 (Clupeoidei).
Regan, C. T. 1909 B, 77 (Clupeoidei).
Ridewood, W. G. 1905 B, 448 ("clupeoid fishes").
Tracy, H. C. 1920 A, 441 ("clupeoids").

ICHTHYODECTIDÆ Crook.

Crook, A. R. 1892 A, 111, 121.
Hay, O. P. 1902 A, 383 (Chirocentridæ, Ichthyodectinæ).
Arldt, T. 1923 A, 499 ("saurodontiden").
Cockerell, T. D. A. 1919 A, 177, 178.
Etheridge, R. 1905 A, 5.
Fowler, H. W. 1911 A, 154.
Jordan, D. S. 1905 A, ii, 48.
1907 B, 274, 761.
Jordan, D. S. 1923 A, 119.
Regan, C. T. 1922 A, 206.
Sauvage, H. E. 1901 F, 77 ("ichthyodectidés").
Schlosser, M. 1901 L, 479.
1917 A, 140, 141, 142 ("ichthyodectiden").
Zittel and Koken 1911 A, 128.
Zittel and Schlosser 1923 A, 127.
Zittel and Woodward 1902 A, 95.

XIPHACTINUS Leidy. Type *X. audax* Leidy.

Leidy, J. 1870 H, 12.
Hay, O. P. 1902 A, 383 (Portheus, in part).
Bayer, F. 1908 A, 1.
Cope, E. D. 1871 S, 608.
Jordan, D. S. 1919 B, 358.
Rogers, A. F. 1924 A, 546.

Woodward, A. S. 1901 A, 92 (Syn. of Portheus).
The fin-ray on which this genus was based probably belonged to one of the species below referred to *Portheus*.

Xiphactinus audax Leidy.

Leidy, J. 1870 H, 12.
Hay, O. P. 1902 A, 384 (Portheus?).
Upper Cretaceous (Niobrara); Kansas.

PORTHEUS Cope. Type *P. molossus* Cope.

Hay, O. P. 1902 A, 383.
Ameghino, F. 1906 A, 186.
Andreae, A. 1901 A, 309.
1904 A, 309 (Porteus).
Bayer, F. 1908 A, 1 [Portheus (Xiphactinus)].
1909 A, 48.
Cockerell, T. D. A. 1917 A, 62.
1919 A, 177 (Hypsodon).
Cope, E. D. 1880 U, 147.
Dames, W. 1899 I, 155.
Dean, Gudger, Henn 1923 A, 626.
Dollo, L. 1892 F, 181.
Etheridge, R. 1905 A, 5.
Hay, O. P. 1899 H, 487.
Hennig, E. 1912 A, 490.
Jordan, D. S. 1919 B, 186, 219.
Leriche, M. 1902 B, 137.
McClung, C. E. 1908 B, 235, pls. x-xii; text-figs. 1-7.
Osborn, H. F. 1904 I, 35.
1917 B, 209, 210, fig.
Priem, F. 1908 B, 61, fig. 23 (Portheus).
Ridewood, W. G. 1905 B, 492.
Rogers, A. F. 1924 A, 546 (Xiphactinus).
Sauvage, H. E. 1899 C, 151.
Schlosser, M. 1901 L, 480.
Storms, R. 1891 A, 150, 151.
Woodward, A. S. 1894 C, 444.
1901 A, 87, 921.
1912 A (1907), 99, pls. xxi; text-figs. 26-30.
1913 A, 529 (Portheus,=? Chirocentrites).
Zittel and Koken 1911 A, 128.
Zittel and Schlosser 1923 A, 127 (Portheus).
Zittel and Woodward 1902 A, 95.
This genus is possibly identical with *Xiphactinus* and *Hypsodon*.

Portheus brachygnathus Stewart.

Hay, O. P. 1902 A, 384.
Schlosser, M. 1901 L, 479 (Xiphactinus).
Woodward, A. S. 1901 A, 97.
Upper Cretaceous (Niobrara); Kansas.

Portheus? granulosus (Cockerell).

Cockerell, T. D. A. 1919 A, xxxii, fig. 5 (Hypsodon).
Upper Cretaceous (Mowry); Wyoming.

Portheus lestrio Cope.

Hay, O. P. 1902 A, 384.
Bayer, F. 1908 A, 3.
1909 A, 102.
Hussakof, L. 1908 A, 88.
Woodward, A. S. 1901 A, 97.
Cretaceous (Niobrara); Kansas.

Portheus lowii Stewart.

Hay, O. P. 1902 A, 384.
Cockerell, T. D. A. 1919 A, 178, pl. xxxiv, fig. 2 (Hypsodon).
Dames, W. 1899 I, 156.
Woodward, A. S. 1901 A, 97.
Upper Cretaceous (Benton); Kansas.

Portheus molossus Cope.

Hay, O. P. 1902 A, 384 (P. audax, P. molossus, P. thaumas).
Abel, O. 1922 C, 320.
Andreae, A. 1901 A, 309.
Anonymous, 1910 A, 198.
Bayer, F. 1908 A, 3 (P. molossus, P. thaumas).
1909 A, 98 (P. molossus); p. 100 (P. thaumas).
Cockerell, T. D. A. 1908 C, 173 (P. thaumas).
1919 A, 177, pl. xxxii, fig. 8; pl. xxxiii, figs. 1, 2 (Hypsodon).
Cope, E. D. 1891 N, 23, fig. 10.
Holland, J. W. 1909 A, 453 (P. molossus).
Hussakof, L. 1908 A, 88, fig. 46 (P. molossus); 89 (P. thaumas).
Jaekel, O. 1911 A, 89, 90, figs. 100, 101 (P. molossus, P. thaumas).
Jordan, D. S. 1905 A, ii, 48, fig. 36.
1907 B, 274.
Lambe, L. M. 1914 H, 399, 402, pl. i.
1915 B, 118.
Martin, H. T. 1907 A, 128, fig.
Osborn, H. F. 1901 E, 331.
1901 G, 160.
1904 E, 377, pl. x; text-figs. 1-4.
1904 F, 35.
Reeside, J. B. 1924 A, 11, pl. iii.
Sternberg, C. H. 1881 B, 4.
1905 A, 127.
1907 A, 295.
1907 C, 122 (P. colossus).
1909 C, 54, fig. 12.
1913 A, 48.
1917 A, 11, 168, fig. 5.
1918 A, 205 (Porthus).
Stromer, E. 1912 A, 33, fig. 44.
Woodward, A. S. 1901 A, 92 (P. molossus); 97 (P. thaumas).
1912 A (1907), 100, text-figs. 26-28.
1913 A, 529, pl. xviii.
1921 C, 181.
Zittel and Schlosser 1923 A, 128, fig. 224.
Upper Cretaceous (Niobrara): Kansas.

Portheus mudgei Cope.

Hay, O. P. 1902 A, 384.
Bayer, F. 1908 A, 2.
1909 A, 102.
Woodward, A. S. 1901 A, 97.
Upper Cretaceous (Niobrara); Kansas.

Portheus? radiatulus (Cockerell).

Cockerell, T. D. A. 1919 A, 178, pl. xxxii, figs. 6, 7 (Hypsodon).
Reeside, J. B. 1924 A, 12, pl. iii (Hypsodon).
Upper Cretaceous (Mancos); Colorado, New Mexico: Upper Cretaceous (Mesa Verde); Wyoming.

Portheus sp. indet.

Hill, R. T. 1901 A, 328 (Xiphactinus). Lower Cretaceous (Eagle Ford); Texas.
Hussakof, L. 1908 A, 90 (Portheus). Upper Cretaceous (Niobrara); Kansas.

Reeside, J. B. 1924 A, 17, pl. iii (Hypsodon). Upper Cretaceous (Lewis); Colorado.
Stephenson, L. W. 1912 A, 128, 140 (Portheus sp. indet.). Upper Cretaceous, North Carolina.
Sternberg, C. H. 1906 B, 122 (Portheus). Cretaceous (Niobrara); Kansas.

CLADOCYCLUS Agassiz. Type *C. gardneri* Agassiz.

Agassiz, L. 1841, Edinb. New Philos. Jour., xxx, 83.
Hay, O. P. 1902 A, 399.
Bronn, H. G. 1849 A, 675.
Cockerell, T. D. A. 1917 A, 61.
Jordan, D. S. 1923 A, 123.
Leriche, M. 1902 B, 137.
Storms, R. 1891 A, 156.
Toula, F. 1905 A, 65.
Woodward, A. S. 1894 C, 445.
1912 A (1903), 96 (Syn. of Ichthyodectes).

Cladocyclus occidentalis Leidy.

Hay, O. P. 1902 A, 399.
Cockerell, T. D. A. 1919 A, 177 (Syn.? of Hypsodon audax).
Lambe, L. M. 1904 C, 21, 36, 44.
Tyrrell, J. B. 1892 A, 108.
Upper Cretaceous (Colorado); Nebraska or Dakota, Manitoba.

ICHTHYODECTES Cope. Type *I. ctenodon* Cope.

Hay, O. P. 1902 A, 384.
Andreæ, A. 1904 A, 309.
Arldt, T. 1923 A, 499.
Bayer, F. 1908 A, 3.
Boulenger, G. A. 1904 D, 561, 743.
Cockerell, T. D. A. 1919 A, 179.
Cope, E. D. 1880 U, 147.
Dames, W. 1899 I, 155.
Dean, Gudger, Henn 1923 A, 684.
Dollo, L. 1892 F, 181.
Etheridge, R. 1905 A, 6.
Ridewood, W. G. 1905 B, 492.
Storms, R. 1891 A, 150.
Woodward, A. S. 1901 A, 99.
1912 A, (1903), 93; (1907), 97, text-fig. 24.
Zittel and Koken 1911 A, 129.
Zittel and Schlosser 1923 A, 128.
Zittel and Woodward 1902 A, 95.

Ichthyodectes acanthicus Cope.

Hay, O. P. 1902 A, 384.
Hussakof, L. 1908 A, 75, fig. 39.
Woodward, A. S. 1901 A, 107.
Cretaceous (Niobrara); Kansas.

Ichthyodectes anaides Cope.

Hay, O. P. 1902 A, 384.
Etheridge, R. 1905 A, 8.
Hay, O. P. 1903 A, 54.
Hussakof, L. 1908 A, 75.
Lambe, L. M. 1914 H, 402.
Woodward, A. S. 1901 A, 100.
Cretaceous (Niobrara); Kansas.

Ichthyodectes cruentus Hay.

Hay, O. P. 1902 A, 385.
Woodward, A. S. 1901 A, 107.
Cretaceous (Niobrara); Kansas.

Ichthyodectes ctenodon Cope.

Hay, O. P. 1902 A, 385.
Etheridge, R. 1905 A, 8.
Hussakof, L. 1908 A, 76.
Woodward, A. S. 1901 A, 100.
1912 A, (1903), 93.
Cretaceous (Niobrara); Kansas.

Ichthyodectes hamatus Cope.

Hay, O. P. 1902 A, 385.
Etheridge, R. 1905 A, 8.
Hussakof, L. 1908 A, 76.
Woodward, A. S. 1901 A, 107.
Cretaceous (Niobrara); Kansas.

Ichthyodectes multidentatus Cope.

Hay, O. P. 1902 A, 385.
1903 A, 57, text-figs. 42, 43.
Hussakof, L. 1908 A, 76.
Loomis, F. B. 1900 A, 243, 245, pl. xxiii, fig. 9; text-figs. 8, 9.
Woodward, A. S. 1901 A, 107.
Cretaceous (Niobrara); Kansas.

Ichthyodectes parvus Stewart.

Hay, O. P. 1902 A, 385.
Upper Cretaceous (Niobrara); Kansas.

Ichthyodectes prognathus Cope.

Hay, O. P. 1902 A, 385.
Hussakof, L. 1908 A, 77.
Woodward, A. S. 1901 A, 107.
Upper Cretaceous (Niobrara); Kansas.

Ichthyodectes sp. indet.

Cockerell, T. D. A. 1919 A, 179. Cretaceous (Niobrara); Montana: Cretaceous (Benton); Colorado.
Hill, R. T. 1901 A, 328 Lower Cretaceous (Eagle Ford); Texas.
Reeside, J. B. 1923 A, 205. Cretaceous (Dakota?); Colorado.
1924 A, 11. Upper Cretaceous (Mancos); Colorado.

GILLICUS Hay. Type *Portheus arcuatus* Cope.

Hay, O. P. 1902 A, 386.
1903 A, 59.
Hennig, E. 1912 A, 490.
Jordan, D. S. 1920 C, 480.

McClung, C. E. 1908 B, 243, fig. 8.
Woodward, A. S. 1901 A, 99, 101 (Ichthyodectes).
Zittel and Koken 1911 A, 129.
Zittel and Schlosser 1923 A, 128.
Zittel and Woodward 1902 A, 95.

Gillicus arcuatus (Cope).

Hay, O. P. 1902 A, 386.
Hussakof, L. 1908 A, 74.
Lambe, L. M. 1914 H, 402.
Upper Cretaceous (Niobrara); Kansas.

SAUROCEPHALIDÆ Zittel.

Zittel, K. A. 1890 A (1888), 262.
Hay, O. P. 1902 A, 385 (Saurocephalinæ).
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 154, 281.
Boulenger, G. A. 1904 A, 164 (Saurodontidæ).
1904 D, 561 (Saurodontidæ).
Dean, Gudger, Henn 1923 A, 626 (Saurodontidæ).
Goodrich, E. S. 1909 A, 390 (Saurodontidæ).
Hay, O. P. 1899 H, 487.
Jordan, D. S. 1923 A, 120 (Saurodontidæ).
Ridewood, W. G. 1905 B, 492 (Saurodontidæ).
Sauvage, H. E. 1901 A, 5 (Saurodontidæ).
1901 F, 77 ("saurodontidés").
Schlosser, M. 1917 A, 140 (Saurodontiden).
Zittel and Woodward 1902 A, 96 (Saurodontidæ).

SAUROCEPHALUS Harlan. Type *S. lanciformis* Harlan; not of Agassiz.

Hay, O. P. 1902 A, 385.
Agassiz, L. 1845 B, 300.
Andreae, A. 1901 A, 308 (Saurocephalus, Saurodon).
1904 A, 309.
Arldt, T. 1923 A, 499.
Bayer, F. 1908 A, 3 (Saurodon, Daptinus).
Bronn, H. G. 1848 B, 1112.
1849 A, 675.
Cope, E. D. 1871 S, 608.
1880 U, 147 ("saurocephale").
Dames, W. 1899 I, 155 (Saurocephalus, Saurodon, Daptinus).
Dollo, L. 1892 F, 181 (Saurocephalus, Daptinus).
Fowler, H. W. 1911 A, 154.
Gervais, P. 1852 A, explan. pl. lxx.
1859 A, 522, pl. lxx.
Giebel, C. G. 1855 A, 104.
Gray, J. E. 1825 A, 196.
Harlan, R. 1833 A, 174.
Hay, O. P. 1899 H, 480.
1903 A, 48.
Hennig, E. 1912 A, 490 (Saurodon, Saurocephalus).
Jordan, D. S. 1923 A, 119, 120.
Jordan and Evermann 1917 A, 118.
Mantell, G. A. 1844 A, 665, fig. 136.
Priem, F. 1908 B, 37.
Ridewood, W. G. 1905 B, 492 (Saurodon).
Sauvage, H. E. 1899 C, 150 (Saurodon).
Schlosser, M. 1901 L, 479 (Saurocephalus, Saurodon).
Storms, R. 1891 A, 150.
Woodward, A. S. 1901 A, 111 (Saurodon); 113 (Saurocephalus).
1912 A (1907), 103 (Saurodon).
Zittel and Koken 1911 A, 128.
Zittel and Schlosser 1923 A, 128.
Zittel and Woodward 1902 A, 96 (Saurocephalus, Saurodon).
Dames, W. 1899 I, 156 (Daptinus).
Stewart, A. 1900 A, 313, pl. xlviii, figs. 1*a*-1*c* (Saurodon).
Woodward, A. S. 1901 A, 113 (Saurodon).
Upper Cretaceous (Niobrara); Kansas.

Saurocephalus arapahovius Cope.

Hay, O. P. 1902 A, 385.
Woodward, A. S. 1901 A, 114.
Upper Cretaceous (Niobrara); Kansas.

Saurocephalus broadheadi (Stewart).

Hay, O. P. 1902 A, 386.

Saurocephalus dentatus Stewart.

Hay, O. P. 1902 A, 386.
1899 H, 485.
Woodward, A. S. 1901 A, 114.
Upper Cretaceous (Niobrara); Kansas.

Saurocephalus goodeanus (Cope).

Hay, O. P. 1902 A, 385 (Ichthyodectes).
1903 A, 52, text-fig. 41.
Hussakof, L. 1908 A, 97, fig. 49.
Woodward, A. S. 1901 A, 107 (Ichthyodectes).
Cretaceous (Niobrara); Kansas.

Saurocephalus lanciformis Harlan.

Hay, O. P. 1902 A, 386.
Harlan, R. 1833 A, 174, pl. i, figs. 1-5.
Hay, O. P. 1899 H, 480, figs. 1-3.
1903 A, 50.
Hussakof, L. 1908 A, 97 (S. arapahovius a syn.).
Spillman, W. 1863 A.
Woodward, A. S. 1901 A, 113.
Cretaceous (Niobrara); Kansas, Nebraska.

Saurocephalus leanus (Hay).

Hay, O. P. 1902 A, 386.
Fowler, H. W. 1911 A, 155, fig. 94.
Mantell, G. A. 1844 A, 666, fig. 136 (Saurodon).
Merrill, G. P. 1907 A, 19 (Saurocephalus, Saurodon).
Woodward, A. S. 1901 A, 111 (Saurodon).
1912 A (1902), 44 (Saurodon).
Upper Cretaceous (Navesink-Hornerstown); New Jersey.

Saurocephalus pamphagus Hay.

Hay, O. P. 1902 A, 386.
1899 H, 486, fig. 5.
Hussakof, L. 1908 A, 97.
Cretaceous (Niobrara); Kansas.

Saurocephalus phlebotomus Cope.

Hay, O. P. 1902 A, 386.

Cope, E. D. 1872 I, 343 (Saurocephalus).
Crook, A. R. 1892 A, 120, 123 (Daptinus).
Gorjanovič-Kramberger, D. 1891 A, 69, pl. ii, fig. 5 (Daptinus. This species?).
Hay, O. P. 1899 H, 485 (Saurodon).
1903 A, 49, text-fig. 38.
Hussakof, L. 1908 A, 98.
Newton, E. T. 1878 B (Daptinus).
Woodward, A. S. 1901 A, 112 (Saurodon). Cretaceous (Niobrara); Kansas: Cretaceous; Hungary?.

Saurocephalus pygmæus (Loomis).

Hay, O. P. 1902 A, 386.
Woodward, A. S. 1901 A, 113 (Saurodon). Upper Cretaceous (Niobrara); Kansas.

Saurocephalus stewarti, nom. nov.

Hay, O. P. 1902 A, 386 (Saurocephalus ferox; not of Gervais).
Stewart, A. 1898 C, 183, pl. xv, pl. xvi, figs. 1-3 (Saurodon ferox).
Woodward, A. S. 1901 A, 113 (Saurodon ferox). Upper Cretaceous (Niobrara); Kansas.

Saurocephalus xiphirostris (Stewart).

Stewart, A. 1898 D, 178 (Saurodon).
Hay, O. P. 1902 A, 386.
1903 A, 51, text-figs. 39, 40.
Hussakof, L. 1908 A, 96.
Woodward, A. S. 1901 A, 113 (Saurodon).
1912 A (1907), 104 text-fig. 31 (Saurodon). Cretaceous (Niobrara); Kansas.

Saurocephalus sp. indet.

Hussakof, L. 1908 A, 98 (This genus?). Upper Cretaceous (Niobrara); Kansas.
Tuomey, M. 1848 A, 180 ("Saurocephalus"). Pliocene?; South Carolina.

CLUPEIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 95.
Hay, O. P. 1902 A, 390.
Abel, O. 1912 F, 441.
Agassiz, L. 1832 A, 142 ("clupeoiden").
Ahlborn, F. 1896 B, 12 ("clupeiden").
Allis, E. P. 1909 A, 213.
1915 A.
Arldt, T. 1907 D, 646.
1912 A, 762 (Clupeinæ).
1923 A, 500 ("clupeiden").
Baudelot, E. 1873 A, 97, 192, pl. v, figs. 8, 12 (Clupea).
Belling, D. E. 1912 A, 60 ("clupoiden").
Bonaparte, C. L. 1833 B, 1201.
1838 B, 132.
Boulenger, G. A. 1901 D, 123.
1904 A, 164.
1904 D, 562, 736.
1917 B, 330.
Bronn, H. G. 1849 A, 780, seq. (Clupeoidei).
Bridge, T. W. 1896 A, 557.
Carus, V. 1875 A, 577 (Clupeoidei).
Cockerell, T. D. A. 1910 B, 61 ("clupeid fishes").
1913 B, 123.
Cope, E. D. 1871 D, 455.
Creaser, C. W. 1926 A, 53.
Cunningham, J. T. 1897 A, 493.
1912 A, 246.
Cuvier, G. 1805 A ("harengs").
Dahl, K. 1910 A, 603.
Dean, Gudger, Henn 1923 A, 675.
Dietz, P. A. 1917 A, 85.
Derjugin, K. 1910 A, 603.
Duméril, A. 1856 A, 412 ("clupéides").
Eastman, C. R. 1911 B, 377 ("clupeoids").
Fitzinger, L. J. 1873 A, 37 (Clupea).
Fryd, C. 1901 A, 34.
Fulton, T. W. 1906 A, 77.
Gaupp, E. 1898 B, 823 ("clupeiden").
Gill, T. 1861 C, 33 ("clupioids").
1885 C, 135.
Goette, A. 1879 A, 128 ("clupeiden").
Goodrich, E. S. 1909 A, 391.
Gregory, W. K. 1907 D, 471 ("clupeoid fishes").
Haller, B. 1906 A, 233 ("clupeiden").
Hase, A. 1911 B, 338 ("clupeoid").
Hasse, C. 1873 A, 584, figs. 9-12 ("clupeiden").
1873 B, 629 ("clupeiden").
Heckel, J. 1850 A, 364.
1850 B, 146 ("clupeiden").
1856 A, 242.
Hoernes, R. 1886 A, 529.
Hoeven, J. 1822 A (Clupeæ).
Jordan, D. S. 1885 A, 135.
1905 A, II, 49, 564 (Clupeidæ); 43 (Spaniodontidæ).
1907 A, 126, figs. 20, 21 ("Clupeoid fish, A. B. C.").
1907 B, 275, 761.
1921 A, 242.
1923 A, 120.
Jordan and Gilbert 1882 A, 262.
Klaatsch, H. 1890 A, 165 ("clupeiden").
Klein, E. F. 1868 A ("clupeen").
1879 A, 106 (Clupeina).
1884 A, 131, 132, 134, 135, 138, 147, 148, 153, 156, 164, 230, 242, 248.
1885 A, 109, 114, 146, 161, 189, 215, 242.
1886 A, 206, 224, 259, 294.
Kner, R. 1861 A, 250 (Clupeoidei).
Köstlin, O. 1844 A ("clupeen").
Kolzoff, N. K. 1896 A, 515, fig. 1 (Clupea).
Leunis and Ludwig 1883 A, 756.
Lönnberg, E. 1902 A.
Meckel, J. F. 1825 A ("clupeen").
Meek, A. 1916 A, 65.
Moodie, R. L. 1911 G, 282.
Norman, E. W. 1926 A.
Palacký, J. 1902 B, 141 ("clupeiden").
Pychlau, W. 1908 A, 693 ("clupeiden").
Rauther, M. 1913 A, 1100.
Regan, C. T. 1910 A, 356.
1910 B, 531.
1916 A, 1.
Retterer, E. 1905 C, 246 (Clupea).
Richardson, J. 1836 A, 229 (Clupeoideæ).
Sagemehl, M. 1883 A ("clupeiden").
1884 A, 101 ("clupeiden").
Schlosser, M. 1917 A, 139, 140, 142 ("clupeiden").

Schubert, R. J. 1906 A, 657.
Siebenrock, F. 1901 A, 108.
Stannius, H. 1849 A, 538.
Steinmann, G. 1927 A, 12 ("clupeiden").
Stephan, P. 1900 A, 301.
Thilo, O. 1908 A, 777 ("clupeiden").
Tims, H. W. 1905 A, 55 ("clupeoids").
Traquair, R. H. 1900 C, 508 ("clupeoids").
Wagner, R. 1843 A ("häringe").
Wallace, A. R. 1876 A, ii, 454.
Whitehouse, R. H. 1910 A, 426.
1910 B, 598 ("clupeoids").
1910 C, 139 (Clupea).
Woodward, A. S. 1901 A, vii, 5, 128.
Zittel and Koken 1911 A, 120.
Zittel and Schlosser 1923 A, 125.
Zittel and Woodward 1902 A, 96.

Clupea Linnæus. Type *C. harengus* Linnæus.

Linnæus, C. 1758 A, 317.
Allis, E. P. 1909 A, 213.
Arldt, T. 1923 A, 501.
Baudelot, E. 1873 A, 97, 192, pl. v, figs. 8, 12.
Belling, D. E. 1912 A, 50.
Bronn, H. G. 1848 A, 308.
1849 A, 671.
Cockerell, T. D. A. 1906 A, 160.
1910 B, 63.
1913 B, 123.
Cuvier, G. 1815 A, 109.
Dean, Gudger, Henn 1923 A, 674, 675.
Derjugin, K. M. 1909 A, pl. vii, figs. 61, 62.
1910 A, 603.
Dietz, P. A. 1914 A, 102.
Duméril, A. 1856 A, 416 ("clupée").
Frost, G. A. 1925 A, 154, pl. xi.
Fryd, C. 1901 A, 15, 34, fig. 18.
Fulton, T. W. 1906 A, 77, pls. iii B, v.
Gaupp, E. 1905 D, 914 ("clupeiden").
Giebel, C. G. 1855 A, 109.
Gill, T. 1885 C, 135.
Goodrich, E. S. 1922 A, 505.
Hammarsten, O. D. 1911 A, 677.
Hasse, C. 1873 A, 584.
Hubbs, C. L. 1926 A, 65.
Huntsman, A. G. 1919 A, 592.
Imms, A. D. 1904 A, 23, figs. 122. 125.
Jordan, D. S. 1885 A, 135.
1905 A, ii, 49, 564.
1907 B, 275.
1910 A, 32.
Jordan and Evermann 1917 A, 15.
Jordan and Gilbert 1882 A, 264.
Kingsley, J. S. 1925 A, 239, fig. 251.
Klaatsch, H. 1890 A, 255.
Klein, E. F. 1879 A, 106.
Klein, E. F. 1884 A, 167, 230, 248, pl. ii.
1885 A, 114, 189, 215, 229.
1886 A, 224, 259, fig. 26.
Kolzoff, N. K. 1896 A, 515, fig. 1.
Ledouble, A. F. 1906 A, 551.
Noorden, C. 1883 A, 235, pl. x.
Meek, A. 1916 A, 67-106.
Norman, E. W. 1926 A, 407, figs. 45, 46, 49-51.
Owen, R. 1866 A, 38.
Pevsner, V. 1926 A, 304.
Regan, C. T. 1910 A, 357.
1910 B, 532, fig. 1.
1916 A, 2.
Retterer, E. 1905 C, 246.
Ridewood, W. G. 1904 A, 58.
1904 B, 215.
1905 B, 453.
Schlosser, M. 1917 A, 145.
Stadtmüller, F. 1926 A, 160, fig. 6.
Stannius, H. 1854 A.
Starks, E. C. 1905 A, 754.
Steinmann, G. 1927 A, 12.
Stephan, P. 1900 A, 286.
Tracy, H. C. 1920 A, 444.
Wagner, R. 1843 A.
Weber, E. H. 1821 A, 1061.
Wells, F. R. 1922 A, 1213, figs. 1-11.
Whitehouse, R. H. 1910 A, 427.
1910 B, 597, pl. xlvii, fig. 5.
1910 C, 139.
Woodward, A. S. 1901 A, 146.
Zittel and Koken 1911 A, 120.
Zittel and Schlosser 1923 A, 125.
Zittel and Woodward 1902 A, 96.

Clupea? sp. indet.

Jordan, D. S. 1907 A, 126, 127 ("clupeoid fishes A, B, C."). Miocene; California.

Pomolobus Rafinesque. Type *P. chrysochloris* Rafinesque.

Rafinesque, C. S. 1820, Ichth. Ohien., 38.
Cockerell, T. D. A. 1913 B, 124.
Creaser, C. W. 1926 A, 53.
Dean, Gudger, Henn 1923 A, 696.
Jordan, D. S. 1905 A, ii, 50.
1907 B, 276.
Jordan and Evermann 1896 A, 424.
Jordan and Gilbert 1882 A, 265.
Meek, A. 1916 A, 103.
Regan, C. T. 1917 A, 296, 297.
Tracy, H. C. 1920 A, 453, pls. i-v.

Pomolobus? chicoensis Cockerell.

Cockerell, T. D. A. 1919 A, 180, pl. xxiv, fig. 5. Upper Cretaceous (Chico); California.

Diplomystus Cope. Type *D. dentatus* Cope.

Hay, O. P. 1902 A, 391.
Arldt, T. 1923 A, 501.
Chapman, F. 1918 A, 26, 32.
Cockerell, T. D. A. 1908 C, 173.
Cope, E. D. 1877 AA, 1.
Costa, O. G. 1850, Atti. Accad. Pontan., v, 228 (Histiurus; type *H. elatus* Costa).
Coulon, L. 1903 A, 154.
Dollo, L. 1904 C, 159 (Copeichthys; type *D. dentatus*).
Eastman, C. R. 1911 B, 374.
1912 B, 372, 374.
Haseman, J. D. 1912 A, 98.
Jordan, D. S. 1905 A, ii, 52, 566.

Jordan, D. S. 1907 B, 278.
1910 A, 23.
1919 B, 388.
1921 A, 243, 244.
Jordan and Gilbert 1920 A, 11.
Ogilby, J. D. 1892, Rec. Austral. Mus., ii, 26 (Hyperlophus; type *Clupea sprattellides* Ogilby).
Rogers, A. F. 1924 A, 545 (Diplomystis).
Schlosser, M. 1917 A, 144.
Seeley, H. G. 1886 A, 412.
Woodward, A. S. 1892 H, 412.
1901 A, viii, 139 (Diplomystus); viii, 146 (Clupea).
1922 C, 97, fig. 106.
Zittel and Koken 1911 A, 120.
Zittel and Woodward 1902 A, 96.

Diplomystus analis Cope.

Hay, O. P. 1902 A, 391.
Cockerell, T. D. A. 1908 C, 173.
Coulon, L. 1903 A, 154.
Eastman, C. R. 1912 B, 378.
Merrill, G. P. 1907 A, 10.
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 8.
Woodward, A. S. 1901 A, 139 (Syn. of *D. dentatus*).
Eocene (Green River); Wyoming.

Diplomystus dentatus Cope.

Hay, O. P. 1902 A, 391.
Cockerell, T. D. A. 1908 C, 173.
Eastman, C. R. 1912 B, 373, 374, 378.
Holland, W. J. 1910 B, 24, pl. vi.
Hussakof, L. 1908 A, 71.
Jordan, D. S. 1910 A, 24, pls. v, vi.
Lee, Stone, Gale 1915 A, 74, pl. xix.
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 8.
Woodward, A. S. 1901 A, 139.
Eocene (Green River); Wyoming.

Diplomystus pectorosus Cope.

Hay, O. P. 1902 A, 391.
Cockerell, T. D. A. 1908 C, 173.
Eastman, C. R. 1912 B, 374, 378.
Merrill, G. P. 1907 A, 10.
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 9 (D. pecterosus).
Woodward, A. S. 1901 A, 140 (Syn. of *D. dentatus*).
Eocene (Green River); Wyoming.

Diplomystus theta Cope.

Hay, O. P. 1902 A, 391.
Woodward, A. S. 1901 A, 140 (Syn. of *D. dentatus*).
Eocene (Green River); Wyoming.

KNIGHTIA Jordan. Type *Clupea humilis* Leidy = *K. eocæna* Jordan.

Jordan, D. S. 1907 A, 136.
Hay, O. P. 1902 A, 391 (Diplomystus in part).
Cockerell, T. D. A. 1908 C, 173.
Cope, E. D. 1870 U, 316, Lithichthys; type *L. pusillus*=?*Clupea pusillus* Cope.
Eastman, C. R. 1912 B, 374.
Jordan, D. S. 1910 A, 23, 24.
1921 A, 246.
Jordan and Gilbert 1920 A, 11.

Knightia alta (Leidy).

Hay, O. P. 1902 A, 391 (Diplomystus).
Cockerell, T. D. A. 1908 C, 173.
Eastman, C. R. 1912 B, 374, 378 (Diplomystus).
Hussakof, L. 1908 A, 78.
Jordan, D. S. 1907 A, 137.
Merrill, G. P. 1907 A, 8 (Clupea); 10 (Diplomystus).
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 10.
Zittel and Schlosser 1923 A, 125.
Woodward, A. S. 1901 A, 145 (Diplomystus).
Eocene (Green River); Wyoming.

Knightia copei Tanner.

Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 11, pl. iii, fig. 6.
Eocene (Green River); Wyoming.

Knightia eocæna Jordan.

Jordan, D. S. 1907 A, 136.
Hay, O. P. 1902 A, 391 (Diplomystus humilis).
Cockerell, T. D. A. 1908 C, 173 (Clupea humilis, C. pusilla. "Both preoccupied").
1910 B, 63.
Cope, E. D. 1870 U, 316 (Lithichthys pusillus. This species?).
Dollo, L. 1904 C, 161 (Copeichthys humilis).
Eastman, C. R. 1912 B, 378.
Hussakof and Bryant 1919 A, 198 (K. humilus).
Jordan, D. S. 1905 A, ii, 52, fig. 41 (Diplomystus humilis).
1910 A, 23, 24, pl. vii.
Merrill, G. P. 1907 A, 8 (Clupea humilis); 10 (Diplomystus humilis).
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 9.
Woodward, A. S. 1901 A, 144 (Diplomystus humilis).
Eocene (Green River); Wyoming.

XYNE Jordan and Gilbert. Type *X. grex* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 25.
Jordan, D. S. 1920 C, 568.
1921 A, 242.
Jordan and Gilbert 1920 A, 9 (Xyne); 11 (Ellimma).

Xyne fitgeri Jordan and Gilbert, J. Z

Jordan and Gilbert 1920 A, 10, pls. iv, v.
Jordan, D. S. 1921 A, 243.
Miocene (Monterey); California.

Xyne grex Jordan and Gilbert.

Jordan and Gilbert 1919 A, 25, pl. ix, fig. 1; pl. x, fig. 2; pl. xi, figs. 2, 3.
Hubbs, C. L. 1924 A, 178.
Jordan, D. S. 1920 A, 18, fig. 2.
1921 A, 239, 242, pl. xviii.
Jordan, D. S. 1922 D, 272, fig. 2.
1925 B, 40.
Jordan and Gilbert 1920 A, 9, pls. i-iii.
Rogers, A. F. 1924 A, 545.
Woodward, A. S. 1921 C, 181.
Miocene (Monterey); California.

QUISQUE Jordan. Type *Q. gilberti* Jordan.

Jordan, D. S. 1920 C, 571.
Jordan, D. S. 1921 A, 246.

Quisque bakeri Jordan

Jordan, D. S. 1922 A, 249, figs. 1, 2.
Miocene (Lower); Texas.

Quisque gilberti Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 245, pl. xx, fig. *a*.
Miocene (Monterey); California.

XYRINIUS Jordan and Gilbert. Type *X. houshi* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 50.
Jordan, D. S. 1920 C, 560.
1921 A, 244.

Xyrinius barbaræ (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 27, pl. ix, fig. 3 (Ellimma).
Jordan, D. S. 1921 A, 244.
Jordan and Gilbert 1920 A, 11 (Ellimma).
Miocene (Monterey); California.

Xyrinius elmodenæ (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 26, pl. xii, fig. 1 (Ellimma).
Jordan, D. S. 1921 A, 244, pl. xix.
Jordan and Gilbert 1920 A, 11 (Ellimma).
Miocene (Monterey); California.

Xyrinius houshi Jordan and Gilbert.

Jordan and Gilbert 1919 A, 50, pl. xxi, fig. 2.
Jordan, D. S. 1921 A, 244.
Miocene (Monterey); California.

ALISEA Jordan and Gilbert. Type *A. grandis* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 28.

Alisea grandis Jordan and Gilbert.

Jordan and Gilbert 1919 A, 28, pl. xvii, fig. 3.
Jordan, D. S. 1921 A, 245, pl. xxvii, fig. *b*.
Miocene; California.

DIRADIAS Jordan. Type *D. aratus* Jordan.

Jordan, D. S. 1924 B, 42.
1925 B, 8.

Diradias aratus Jordan.

Jordan, D. S. 1924 B, 42, pl. F.
1925 B, 8.
1927 B, 89.
Miocene (Monterey); California.

Diradias fenestralis Jordan.

Jordan, D. S. 1925 B, 9, pl. i.
Jordan and Gilbert 1920 A, 17, pl. ix (Thyrsion velox, in part).
Miocene (Monterey); California.

XENOTHRISSA Jordan. Type *X. aphrasta* Jordan.

Jordan, D. S. 1925 B, 10.

Xenothrissa aphrasta Jordan.

Jordan, D. S. 1925 B, 10-49, pl. ii.
Miocene (Monterey); California.

LEMBICUS Jordan. Type *L. meiklejohni* Jordan.

Jordan, D. S. 1925 B, 42.

Lembicus meiklejohni Jordan.

Jordan, D. S. 1925 B, 42.
Miocene (Puente); Calfiornia.

EPELICHTHYS Jordan. Type *E. michaëlis Jordan.*

Jordan, D. S. 1925 B, 48.

Epelichthys michaëlis Jordan.

Jordan, D. S. 1925 B, 48, pl. 20.
Upper Miocene (San Miguel); California.

ENGRAULIDIDÆ Gill.

Gill, T. 1872 C, 17.
Cockerell, T. D. A. 1913 B, 123.
Günther, A. C. 1868 A, vii, 383 (Engraulidina).
Jordan, D. S. 1925 B, 12 (Engraulidæ).
Jordan and Evermann 1896 A, 439 (Engraulididæ).
Jordan and Gilbert 1882 A, 271 (Engraulididæ).

ENGRAULITES Jordan and Gilbert. Type *E. remifer* Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 12.

Engraulites remifer Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 12, pl. iii.
Miocene (Monterey); California.

DUSSUMIERIIDÆ Gill.

Gill, T. 1872 B, 17.
Günther, A. C. 1868 A, 464 (Dussumieriinæ).
Jordan, D. S. 1885 A, 136 (Dussumierinæ).
1905 A, ii, 52.
1923 A, 121.
1925 B, 41.
Jordan and Evermann 1896 A, 417 (Dussumieriinæ).
Jordan and Gilbert 1882 A, 263 (Dussumieriinæ).
Jordan and J. Z. Gilbert 1919 A, 30.

Smithites elegans Jordan and Gilbert.

Jordan and Gilbert 1919 A, 30, pl. xxix, fig. 3.
Duncker, G. 1923 A, 39.
Jordan, D. S. 1925 B, 42.
1926 B, 221, 223.
1927 A, 191.
1927 B, 97.
This supposed species is not, as was originally believed, an American fish, but is *Clupea elongata* of Steindachner, an Austrian fossil form.

QUÆSITA Jordan and Gilbert. Type *Q. quisquilia* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 30, 31.
Jordan, D. S. 1921 A, 246.
1921 B, 462.

Quæsita alhambræ Jordan and Gilbert.

Jordan and Gilbert 1920 A, 43, pl. xxviii.
Jordan, D. S. 1921 A, 247.
Miocene; California.

Quæsita fragilis Jordan and Gilbert.

Jordan and Gilbert 1920 A, 43.
Jordan, D. S. 1921 A, 247, pls. xiv *b*, xxiii, fig. *b*.
Miocene?; California.

Quæsita quiescens Jordan.

Jordan, D. S. 1925 B, 11, pl. iii.
Miocene (Monterey); California.

Quæsita quisquilia Jordan and Gilbert.

Jordan and Gilbert 1919 A, 30, 32, pl. viii, fig. 3; pl. x, fig. 2; pl. xvii, fig. 1.
Jordan, D. S. 1921 A, 246, pl. xxii, fig. *a*.
1925 B, 12.
Miocene (Monterey); California.

STERNBERGIA Jordan and Gilbert. Type *S. waitei* Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 41.

Sternbergia waitei Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 41, pl. xx.
Miocene (Puente); California.

LYGISMA Jordan and Gilbert. Type *L. tenax* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 33.
Jordan, D. S. 1921 A, 248.
1921 B, 462.

Lygisma tenax Jordan and Gilbert.

Jordan and Gilbert 1919 A, 33, pl. viii, fig. 2; pl. xiv, fig. 1.
Jordan, D. S. 1921 A, 248, pl. xxi, fig. *a*.
1925 B, 42.
Jordan and Gilbert 1920 A, 12.
Miocene (Monterey); California.

Superfamily GONORHYNCHOIDÆ, new form.

Carus, V. 1875 A, 576 (Gonorhynchoidei).
Gill, T. 1893 A, 131 (Ganorhynchoidei).
Regan, C. T. 1909 B, 77 (Gonorhynchoidei, as suborder).

GONORHYNCHIDÆ Richardson.

Richardson, J. 1856 A, 254.
Hay, O. P. 1902 A, 392.
Allis, E. P. 1909 A, 214 (Gonorhynchus).
Arldt, T. 1907 D, 656.
1923 A, 504.
Boulenger, G. A. 1902 C, 389.

Boulenger, G. A. 1904 A, 165.
1904 D, 572.
Cockerell, T. D. A. 1923 A, 120.
Cope, E. D. 1871 T, 455.
Dean, Gudger, Henn 1923 A, 594, 634.
Dietz, P. A. 1917 A, 84.
Eastman, C. R. 1917 A, 289.
Frost, G. A. 1925 A, 161, pl. xiii (Gonorynchus).
Gill, T. 1885 C, 137.
Gregory, W. K. 1907 D, 471.
Günther, A. C. 1868 A, 373.
1881 A, 693.
Hubbs, C. L. 1919 B, 65.
Jordan, D. S. 1885 A, 137.
1905 A, ii, 54, 572.
1907 B, 280.
1923 A, 120 (Gonorhynchidæ, Notogoneidæ).
Meek, A. 1916 A, 63.
Ogilby, J. D. 1911 A, 30.
Ridewood, W. G. 1904 A, 59 (Gonorhynchus).
1905 A, 361.
Woodward, A. S. 1898 H, 413.
1901 A, ix, 6, 271.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 100.

NOTOGONEUS Cope. Type *N. osculus* Cope.

Hay, O. P. 1902 A, 392 (Notogoneus); 394 (Procatostomus).
Arldt, T. 1923 A, 504.
Boulenger, G. A. 1904 D, 572.
Cockerell, T. D. A. 1916 A, 899.
1923 A, 120.
Eastman, C. R. 1917 A, 289.
Haseman, J. D. 1912 A, 98.
Jordan, D. S. 1923 A, 120.
Meek, A. 1916 A, 63.
Priem, F. 1900 A, 846.
1907 C.
Woodward, A. S. 1898 H, 413.
1901 A, ix, 275.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 100.

Notogoneus osculus Cope.

Hay, O. P. 1902 A, 392 (N. osculus); 394 (Procatostomus constablei).
Cockerell, T. D. A. 1916 A, 899.
Dean and Eastman 1917 A, 623 (Procatostomus constablei a syn.).
Eastman, C. R. 1917 A, 289, fig. 9.
Hussakof, L. 1908 A, 83, fig. 43.
Jordan, D. S. 1905 A, ii, 56, fig. 44.
1907 B, 281, fig. 215.
Jordan and Gilbert 1919 A, 63.
Woodward, A. S. 1901 A, 275.
Eocene (Green River); Wyoming.

Superfamily STOMIATOIDÆ, new form.

Jordan, D. S. 1923 A, 126 (Enchodontoidei, Stomatioidei).
Regan, C. T. 1909 B, 82 (Stomiatoidei).
1923 A, 612 ("stomiatoid fishes").

GONOSTOMATIDÆ Regan.

Regan, C. T. 1923 A, 613.
Boulenger, G. A. 1904 D, 571 (Gonostomatinæ).
Goodrich, E. S. 1909 A, 395 (Gonostomatinæ).
Günther, A. C. 1864 A, 391 (Chauliodontina, in part).
Jordan, D. S. 1905 A, 129 (Gonostomidæ).
1921 A, 249.
1923 A, 127.
Jordan and Evermann 1896 A, 578 (Gonostominæ).
Regan, C. T. 1923 A, 613.

AZALOIS Jordan and Gilbert. Type *A. angelensis* Jord. and Gilbert.

Jordan and Gilbert 1919 A, 32.
Jordan, D. S. 1921 A, 249.

Azalois angelensis Jordan and Gilbert.

Jordan and Gilbert 1919 A, 32, pl. xv, fig. 2.
Jordan, D. S. 1921 A, 249, pl. xxiii, fig. *a*.
Miocene (Monterey); California.

ENCHODONTIDÆ.

Lydekker, R., in Nicholson and Lydekker 1899 A, 997.
Hay, O. P. 1902 A, 388.
Arldt, T. 1923 A, 516 ("enchodontiden").
Boulenger, G. A. 1904 A, 169.
1904 D, 608.
Cockerell, T. D. A. 1919 A, 183.
Dean, Gudger, Henn 1923 A, 641.
Fowler, H. W. 1911 A, 157.
Gregory, W. K. 1907 D, 488.
Hay, O. P. 1903 G, 691.
Jordan, D. S. 1905 A, ii, 136, 568.
1907 B, 359.
1923 A, 126.
Kruizinga, P. 1924 A, 311.
Loomis, F. B. 1900 A, 297 (Enchodidæ).
Regan, C. T. 1909 B, 82.
1911 B, 120.
1911 D, 320.
Schlosser, M. 1917 A, 139, 140 ("enchodontiden").
Stromer, E. 1917 A, 23.
Woodward, A. S. 1901 A, 6, 189.
1906 C, 280.
Zittel and Koken 1911 A, 125.
Zittel and Schlosser 1923 A, 130.
Zittel and Woodward 1902 A, 98.

ENCHODUS Agassiz. Type *Esox lewesiensis* Mantell.

Agassiz, L. 1843 B (1835), 55 (feuilleton).
Hay, O. P. 1902 A, 388.
Andreae, A. 1904 A, 309.
Berry, E. W. 1916 A, 356.
Bronn, H. G. 1848 A, 459.
1849 A, 676.
Cope, E. D. 1880 U, 147.
Coulon, L. 1903 A, 153.
Davis, J. W. 1887 C, 601 (Eurygnathus, type *E. ferox* Davis).
Dollo, L. 1892 F, 183, figs. 2-4.
Eastman, C. R. 1912 B, 377.
Fowler, H. W. 1911 A, 157.
Gervais, P. 1852 A, explan. pl. lxx.
1859 A, 522, pl. lxx, fig. 3.
Giebel, C. G. 1855 A, 104.
Green, W. R. 1913 A, 71.
Hay, O. P. 1903 A, 66.
Heckel, J. J. 1849 in Russegger's Reisen, ii, pt. iii, 342 (Isodus, type *I. sulcatus* Heckel).
Hennig, E. 1912 A, 490 (Euchodus).
Kramberger, D. G. 1881 A, 373 (Solenodon, type *S. neocomiensis* Kramb.).
1885, Rad. Jugoslav. Akad., lxxii, 18 (Holcodon, type *H. lycodon*).
Krause, P. G. 1901 A, 120 (Enchodus, Phasganodus).
Kruizinga, P. 1924 A, 297, 309.
Mantell, G. A. 1844 A, 668.
Marck, W. 1858. Zeitschr. deutch. geol. Gesellsch., x, 248 (Ischyrocephalus, type *I. gracilis* Marck).
Priem, F. 1908 B, 52, pl. i, figs. 10, 11.
Sternberg, C. H. 1881 B, 4.
Storms, R. 1891 A, 142, 152.
1892 A, 1.
Woodward, A. S. 1901 A, 190.
1907 A, 193.
1912 A (1902), 55.
1912 A (1903), 57, pl. xiv; text-figs. 13, 14.
Zittel and Koken 1911 A, 126.
Zittel and Schlosser 1923 A, 130.
Zittel and Woodward 1902 A, 98.

Enchodus amicrodus Stewart.

Hay, O. P. 1902 A, 388.
Green, W. R. 1913 A, 71, 81, 91, pl. x.
Woodward, A. S. 1901 A, 203.
Upper Cretaceous (Niobrara); Kansas.

Enchodus anceps Cope.

Hay, O. P. 1902 A, 389.
Woodward, A. S. 1901 A, 203.
Upper Cretaceous (Niobrara); Kansas.

Enchodus calliodon Cope.

Hay, O. P. 1902 A, 389.
Woodward, A. S. 1901 A, 203.
Upper Cretaceous (Niobrara); Kansas.

Enchodus carinatus (Cope).

Hay, O. P. 1902 A, 389.
Woodward, A. S. 1901 A, 204.
Upper Cretaceous (Niobrara); Kansas.

Enchodus dirus (Leidy).

Hay, O. P. 1902 A, 390 (Cimolichthys).
Berry, E. W. 1916 A, 357, pl. ix, figs. 3-5.
Green, W. R. 1913 A, 77, 81, 88, pl. vi, figs. 3, 4.
Woodward, A. S. 1901 A, 204.
Cretaceous (Fox Hills); North Dakota: (Monmouth); Maryland.

Enchodus dolichus Cope.

Hay, O. P. 1902 A, 389.
Green, W. R. 1913 A, 71, 78, 82, 95, pls. xi-xiv; pl. xv, figs. 10, 12.
Hay, O. P. 1903 A, 72, text-figs. 52, 53.
Hussakof, L. 1908 A, 71, fig. 38.
Woodward, A. S. 1901 A, 204.
Upper Cretaceous (Niobrara); Kansas.

Enchodus ferox Leidy.

Hay, O. P. 1902 A, 389 (E. ferox, E. pressidens).
Fowler, H. W. 1911 A, 158, figs. 95-97 (E. ferox); 161 (E. pressidens).
Green, W. R. 1913 A, 81.
Hay, O. P. 1903 A, 68, text-fig. 50.
Hussakof, L. 1908 A, 72.
Woodward, A. S. 1901 A, 204 (E. ferox), 205 (E. pressidens).
Upper Cretaceous (Navesink, Woodbury, Manasquan?); New Jersey.

Enchodus gentryi (Cope).

Hay, O. P. 1902 A, 389.
Fowler, H. W. 1911 A, 163.
Hussakof, L. 1908 A, 72.
Woodward, A. S. 1901 A, 615 (Phasganodus).
Miocene (Kirkwood); New Jersey.

Enchodus gladiolus Cope.

Hay, O. P. 1902 A, 389.
1903 A, 75, text-figs. 56, 57.
Hussakof, L. 1908 A, 72.
Woodward, A. S. 1901 A, 204.
Cretaceous (Niobrara); Kansas.

Enchodus oxytomus Cope.

Hay, O. P. 1902 A, 389.
Fowler, H. W. 1911 A, 164.
Woodward, A. S. 1901 A, 204.
Upper Cretaceous (Navesink); New Jersey.

Enchodus parvus Stewart.

Hay, O. P. 1902 A, 389.
Woodward, A. S. 1901 A, 204.
Upper Cretaceous (Niobrara); Kansas.

Enchodus petrosus Cope.

Hay, O. P. 1902 A, 389.
Green, W. R. 1913 A, 75, 81, 82; pls. i-v; pl. vi, figs. 1, 2; pls. vii-ix; pl. xv, figs. 14, 15.
Hay, O. P. 1903 A, 70, text-figs. 51, 59, 62.
Hussakof, L. 1908 A, 73.
Woodward, A. S. 1901 A, 205.
Cretaceous (Niobrara); Kansas.

Enchodus sævus Hay.

Hay, O. P. 1903 A, 76, text-figs. 58, 60, 61, 63, 64, 65.
Green, W. R. 1913 A, 73, 82, pls. viii, ix (Syn. of *E. petrosus*).
Hussakof, L. 1908 A, 73.
Zittel and Schlosser 1923 A, 130, fig. 227.
Cretaceous (Niobrara); Kansas.

Enchodus semistriatus Marsh.

Hay, O. P. 1902 A, 389.
Fowler, H. W. 1911 A, 162.
Woodward, A. S. 1901 A, 205.
Upper Cretaceous (Navesink?); New Jersey.

Enchodus serrulatus Fowler.

Fowler, H. W. 1911 A, 162, fig. 98. Upper Cretaceous (Manasquan); New Jersey.

Enchodus shumardi Leidy.

Hay, O. P. 1902 A, 389 (E. shumardii).
Green, W. R. 1913 A, 71, 82, 104, pl. xv, figs. 1-13 (E. shumardii).
Lambe, L. M. 1904 C, 21, 36, 44.
McInnes, W. 1913 A, 67.
Merrill, G. P. 1907 A, 11.
Woodward, A. S. 1901 A, 205.
Cretaceous (Niobrara); Manitoba.

Enchodus tetræcus Cope.

Hay, O. P. 1902 A, 389.
Fowler, H. W. 1911 A, 163, fig. 99.
Hay, O. P. 1903 A, 74, text-figs. 54, 55.
Hussakof, L. 1908 A, 73.
Woodward, A. S. 1901 A, 205.
Upper Cretaceous (Navesink?); Delaware, New Jersey.

Enchodus sp. indet.

Hay, O. P. 1902 A, 389.
Cockerell, T. D. A. 1919 A, 184. Upper Cretaceous (Colorado shale); Montana.
Fowler, H. W. 1911 A, 164, 165, figs. 100-102 (Various undetermined species from New Jersey).
Gidley, J. W. 1926 F, 192, pl. lxxi.
Upper Cretaceous (Ripley); Tennessee.

TETHEODUS Cope. Type *T. pephredo* Cope.

Hay, O. P. 1902 A, 389.
Krause, P. G. 1901 A, 120.
Woodward, A. S. 1901 A, 190 (Syn? of Enchodus).
1912 A (1902), 55 (Syn? of Enchodus).

Tetheodus pephredo Cope.

Hay, O. P. 1902 A, 389.
Woodward, A. S. 1901 A, 205.
Cretaceous (Niobrara); Kansas.

HALECODON Cockerell. Type *H. denticulatus* Cockerell.

Cockerell, T. D. A. 1919 A, 183.

Halecodon denticulatus Cockerell.

Cockerell, T. D. A. 1919 A, 183, pl. xxxvi, fig. 7.
Upper Cretaceous (Aspen); Wyoming.

Superfamily OSTEOGLOSSOIDÆ, new form.

Gill, T. 1893 A, 130 (Osteoglossoidea).
Jordan, D. S. 1923 A, 123 (Osteoglossoidea).
Regan, C. T. 1909 B, 77 (Osteoglossoidei).

OSTEOGLOSSIDÆ Bonaparte.

Bonaparte, C. L. 1846, Cat. Met. Pesci Europei, 7.
Hay, O. P. 1902 A, 393.
Allis, E. P. 1909 A, 214 (Osteoglossum).
Arldt, T. 1907 D, 670.
1912 A, 679, 716.
1923 A, 498 ("osteoglossiden").
Baudelot, E. 1873 A, 110 (Osteoglossum).
Boulenger, G. A. 1901 C, 514.
1904 A, 164.
1904 D, 555, 749.
1917 B, 330.
Bridge, T. W. 1896 A, 644.
Carus, V. 1875 A, 576 (Osteoglossoidei).
Cockerell, T. D. A. 1910 D, 111.
1911 D, 39.
1913 B, 125.
Cope, E. D. 1872 C, 329, 333.
Dean, Gudger, Henn 1923 A, 693.
Eastman, C. R. 1917 A, 288.
Frost, G. A. 1925 A, 159, pl. xii.
Gill, T. 1885 C, 142.
Goodrich, E. S. 1909 A, 390.
Gregory, W. K. 1907 D, 469.
Günther, A. C. 1866 A, 377.
1881 A, 693.
Jordan, D. S. 1885 A, 143.
1905 A, ii, 56, 584.
1907 B, 282, 379.
1923 A, 123.
1925 A, 232 (Osteoglossidæ, Phareodontidæ).
Leunis and Ludwig 1883 A, 755.
Loomis, F. B. 1921 A, 194.
Meek, A. 1916 A, 59.
Rauther, M. 1913 A, 1100.
Regan, C. T. 1910 A, 356.
1916 B, 546.
Ridewood, W. G. 1904 A, 61.
1905 C, 252.
Schlosser, M. 1917 A, 144.
Siebenrock, F. 1901 A, 108.
Steinmann, G. 1927 A, 81 ("osteoglossiden").
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 7 (Phareodontidæ).
Terra, P. 1911 A, 209.
Wallace, A. R. 1876 A, ii, 454.
Woodward, A. S. 1898 B, 117.

Woodward, A. S. 1899 C, 361.
1901 A, vii, 4, 73.
1923 B, 297.
Zittel and Koken 1911 A, 121.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 97.

PHAREODUS Leidy. Type *P. acutus* Leidy.

Hay, O. P. 1902 A, 393.
Allis, E. P. 1923 A, 46 (Osteoglossum).
Arldt, T. 1923 A, 498.
Boulenger, G. A. 1901 C, 515 (Dapedoglossus).
1904 D, 557 (Dapedoglossus).
Cockerell, T. D. A. 1910 D, 111 (Dapedoglossus).
Eastman, C. R. 1917 A, 288 (Dapedoglossus).
Haseman, J. D. 1912 A, 98 (Dapedoglossus).
Jordan, D. S. 1905 A, ii, 56, 586.
1907 B, 282.
1923 A, 123.
1925 A, 232.
Matthew, W. D. 1915 A, 298 (Dapedoglossus).
Meek, A. 1916 A, 59 (Dapedoglossus).
Seeley, H. G. 1886 A, 412 (Dapedoglossus).
1899 C, 361 (Dapedoglossus).
Woodward, A. S. 1901 A, 74 (Dapedoglossus).
Zittel and Woodward 1902 A, 97.

Phareodus acutus Leidy.

Hay, O. P. 1902 A, 393.
Cockerell, T. D. A. 1908 C, 175.
Jordan, D. S. 1907 B, 283.
1925 A, 233.
Woodward, A. S. 1901 A, 75 (Dapedoglossus).
Middle Eocene (Bridger); Wyoming.

Phareodus æquipinnis (Cope).

Hay, O. P. 1902 A, 393.
Cockerell, T. D. A. 1908 C, 175.
Hussakof, L. 1908 A, 87.
Jordan, D. S. 1907 B, 283.
Merrill, G. P. 1907 A, 9 (Dapedoglossus).
Woodward, A. S. 1901 A, 75 (Dapedoglossus).
Lower Eocene (Green River); Wyoming.

Phareodus encaustus (Cope).

Hay, O. P. 1902 A, 393.
Cockerell, T. D. A. 1908 C, 175.
Hussakof, L. 1908 A, 87.
Jordan, D. S. 1905 A, ii, 57.
1907 B, 283.
Woodward, A. S. 1901 A, 76 (Dapedoglossus).
Lower Eocene (Green River); Wyoming.

Phareodus testis Cope.

Hay, O. P. 1902 A, 393.
Boulenger, G. A. 1904 D, 556, fig. 335 (Dapedoglossus).
Cockerell, T. D. A. 1908 C, 175.
1911 D, 39.
Eastman, C. R. 1917 A, 288 (Dapedoglossus).
Hussakof and Bryant 1919 A, 198.
Jordan, D. S. 1905 A, ii, 56, fig. 45.
1907 B, 283, fig. 216.
1925 A, 232, 233.
Merrill, G. P. 1907 A, 9, 10 (Dapedoglossus).
Tanner, V. M. 1925, Bull. Univ. Utah, XIV, No. 6, 7 (Syn. of P. acutus).
Woodward, A. S. 1901 A, 75 (Dapedoglossus).
Lower Eocene (Green River); Wyoming.

Phareodus? sp. indet.

Jordan, D. S. 1907 A, 126. Upper Cretaceous (Chico); California.

EURYCHIR Jordan. Type *E. lindleyi* Jordan.

Jordan, D. S. 1925 A, 232.

Eurychir lindleyi Jordan.

Jordan, D. S. 1925 A, 232, pls. xxii, xxiii. Upper Cretaceous (Niobrara); Kansas.

Superfamily SALMONOIDÆ, new form.

Frost, G. A. 1925 A, 156 (Salmonoidea).
Jordan, D. S. 1905 A, ii, 41, 61 (Salmonoidea).
Jordan, D. S. 1907 B, 268 (Salmonoidea).
1923 A, 124 (Salmonoidei).

SALMONIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 95, 115.
Hay, O. P. 1902 A, 392.
Agassiz, L. 1832 A, 142 ("salmoniden").
1856 C, 63.
Agassiz and Vogt 1845 A ("salmones").
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 680.
1912 A, 716, 762.
1923 A, 503 ("salmoniden").
Belling, D. E. 1912 A, 60 ("salmoniden").
Bonaparte, C. L. 1833 B, 1201.
1838 B, 132.
Boulenger, G. A. 1895 B, 299.
1904 A, 164.
1904 D, 565, 754.
1917 B, 329, 330.
1917 D, 1043.
Braus, H. 1906 A, 173 ("salmoniden").
1919 A, 30.
Bridge, T. W. 1896 A, 550.
Brohl, E. 1909 A, 372 ("salmoniden").
Bronn, H. G. 1849 A, 780 seq. (Salmones).
Bruch, C. 1862 A.
Carus, V. 1875 A, 573 (Salmonoidei).
Carus and Engelmann 1861 A, 1798.
Cockerell, T. D. A. 1913 B, 125.
Collinge, W. E. 1895 B, 290.
Cope, E. D. 1871 T, 455.
Cunningham, J. T. 1886 A, 222.
1897 A, 493.
1912 A, 246, 265.
Cuvier, G. 1805 A ("saumons").
Dahl, K. 1909 A, 765.
Dawson, J. W. 1894 C, 267.

Dean, Gudger, Henn 1923 A, 699.
Dietz, P. A. 1917 A, 85.
Derjugin, K. 1910 A, 586 (Salmo).
Duméril, A. 1856 A, 445 ("salmonides").
Ebner, V. 1896 A, 127 ("salmoniden").
Fitzinger, L. J. 1873 A, 37 (Salmones).
Fulton, T. W. 1906 A, 76.
Fryd, C. 1901 A, 33.
Gaupp, E. 1898 B, 823 ("salmoniden").
1903 A, 119, fig. 1 (Salmo).
1911 A, 414 (Salmo).
Gill, T. 1875 B, 252.
1885 C, 146.
Goette, A. 1879 A, 128 ("salmoniden").
Goodrich, E. S. 1909 A, 393.
Gregory, W. K. 1907 D, 471.
Haller, B. 1906 A, 233 ("salmoniden").
Hase, A. 1907 A, 633 ("salmoniden").
Hoek, P. P. C. 1910 A, 432 ("zalmen").
Hoernes, R. 1886 A, 530.
Hubbs, C. L. 1926 A, 73 ("salmonoids").
Huxley, T. H. 1855 A, 84.
1859 H, 38.
1883 B, 564, 567.
Jackel, O. 1906 A, 24, fig. 16 (Salmo).
Johnston, H. W. 1905 A, 63 ("salmon").
1907 A, 54 ("salmon").
1910 A, 21 ("salmon").
Jordan, D. S. 1885 A, 146.
1905 A, ii, 61, 590.
1907 B, 285.
1923 A, 124.
Jordan and Gilbert 1882 A, 288.
Klaatsch, H. 1890 A, 155 ("salmoniden").
Klein, E. F. 1868 A ("salmonen").
1884 A, 135, 138, 147, 148, 153, 169, 199, 228, 246, 248.
1885 A, 109, 130, 145, 188, 212, 241.
1886 A, 224, 258, 292.
Kner, R. 1861 A, 244 (Salmonides).
Kolzoff, N. K. 1896 A, 516.
Köstlin, O. 1844 A ("salmonen").
Krause, P. G. 1901 A, 120 ("salmoniden").
Leunis and Ludwig 1883 A, 747.
Lönnberg, E. 1902 A (Sa'mones).
Macdonald, W. 1863 A, 63.
McMurrich, J. P. 1910 A, 23.
Mayhoff, H. 1914 A, 403 ("salmoniden").
Meckel, J. F. 1825 A ("lachse").
Meek, A. 1916 A, 112.
Miall, L. C. 1872 A, 26.
Milne, J. A. 1913 A, 572 ("salmon").
Müller, J. 1841 B, cliii ("salmonen").
1845 A, 102, 136 (Salmones).
Owen, R. 1868 A, 907.
Pouchet, G. 1878 A, 59 (Salmones).
Pychlau, W. 1908 A, 693 ("salmoniden").
Rauther, M. 1913 A, 1100.
Regan, C. T. 1910 A, 356.
1913 D, 289.
1914 A, 405.
Richardson, J. 1836 A, 137 (Salmonoidea).
Ridewood, W. G. 1904 A, 58.
Ryder, J. 1886 A, 72 ("salmonoids").
Sagemehl, M. 1884 A, 101 ("salmoniden").
Scheel, C. 1893 A, 1 ("salmoniden").
Shepherd, C. E. 1914 A, 267.
Siebenrock, F. 1901 A, 108.
Stannius, H. 1854 A (Salmones).
Starks, E. C. 1904 B, 601 ("salmonoids").
Stephan, P. 1900 A, 301 ("salmones").
Szily, A. 1907 A, 347 ("forelle").
Terra, P. 1911 A, 210.
Trouessart, E. L. 1906 A, 212.
Turnbull, H. 1909 A, 1095, 1119, 1175.
Vogel, R. 1909 A, 499 ("salmoniden").
Wallace, A. R. 1876 A, ii, 447.
Wagner, R. 1843 A ("lachse").
Willcox, M. A. 1899 A, 153.
Williamson, W. C. 1851 A, 694.
Woodward, A. S. 1901 A, viii, 5, 159.
1922 C, 98.
Zittel and Koken 1911 A, 121.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 97.

Salmo Linn. Type *S. salar* Linn.

Linnæus, C. 1758 A, 308.
Abel, O. 1919 A, 46, figs. 20, 22.
Agassiz and Vogt 1845 A, 1-196, pls. A-O.
Allis, E. P. 1898 A, 428.
1898 B, 95.
1905 A, 452, figs. 24-26.
1909 A, 214.
1919 C, 255.
1922 B, 201.
Baudelot, E. 1873 A, 97.
Beer, G. R. 1924 C, 316, figs. 27-29.
1926 A, 297, figs. 50-61, 115, 121, 132.
Belling, D. E. 1912 A, 50.
Böker, H. 1913 A, 361, pls. xxiv-xxvii; text-figs. 1-10.
Born, J. 1827 A, 190.
Boulenger, G. A. 1895 B, 299.
1904 D, 567, 754.
1917 D, 1041.
Braus, H. 1906 A.
Bronn, H. G. 1848 B, 1109.
Bruch, C. 1862 A.
Carlsson, A. 1894 A, 217, 220.
Cartier, O. 1875 A, 70, pl. iv, figs. 5-9.
Cockerell, T. D. A. 1911 F, 370.
1913 B, 125.
Cockerell and Allison 1909 A, 158, fig. 1.
Collinge, W. E. 1895 B, 290, pl. xx, figs. 13-15.
Cope, E. D. 1891 N, 21, fig. 9.
Cunningham, J. T. 1886 A, 221.
1912 A, 241.
Cuvier, G. 1815 A, 115.
Dahl, K. 1909 A, 766, fig. 4.
Dean, Gudger, Henn 1923 A, 699.
Derjugin, K. 1909 A, pl. vi, figs. 56-58.
1910 A, 609.
Dietz, P. A. 1914 A, 102.
Duméril, A. 1856 A, 446.
Edgeworth, F. H. 1926 A, 185, figs. 19, 20.
Esdaile, P. C. 1912 A.
1913 A, 1 ("salmon").
Fraas, E. 1913 D, lxiii ("lachse").
Frost, G. A. 1913 A, 221.
Fulton, T. W. 1906 A, 76, pl. ii B.
Gaupp, E. 1899 A, 1026, figs. 1, 2 ("lachs").
1903 A, 119, fig. 1.

Gaupp, E. 1905 D, 919.
1906 B, 661.
1911 A, 414.
Gegenbaur, C. 1866 A, 122 ("lachse").
1867 B, 419, pl. ix, fig. 16.
Giebel, C. G. 1855 A, 108.
Gill, T. 1885 C, 158.
Goetsch, W. 1920 A, 13, 15.
Goette, A. 1879 A, 134.
1901 A, 559.
Goodrich, E. S. 1904 A, 478.
1906 A, 347.
1909 A, 516, figs.
Haller, B. 1906 A, 235, pl. xvi, figs. 1-7; pl. xvii, figs. 13-16; text-figs. i-iv.
Harrison, R. G. 1893 A, 249.
1894 A, 59.
Hase, A. 1907 A.
Heckel, J. 1850 A, 364.
1850 B, 146.
Heilprin, A. 1887 A, 68, 69, 288.
Heronimus, C. 1911 A, 199, figs. 6-8.
Hill, C. 1899 A, 356, figs. 1-10.
1900 A, 402, pls. xxviii, xxx.
Hoek, P. P. C. 1909 A, 485, pls. i, ii.
1910 A, 432.
Hollard, H. 1864 B, 249 ("saumon").
Hutton, J. A. 1909 A, pls. i-xiv.
1910 A, pls. i-xxx.
Huxley, T. H. 1859 H, 37.
1883 B, 568.
Jaekel, O. 1906 A, 24, fig. 16.
Johnston, H. W. 1905 A, pls. i-vi ("salmon").
1907 A, 54, pls. i-v ("salmon").
1910 A, 21 ("salmon").
Jordan, D. S. 1885 A, 158.
1905 B, 547.
Jordan and Evermann 1917 A, 14.
Jordan and Gilbert 1882 A, 309.
Kesteven, H. L. 1922 A, 315.
Kindred, J. E. 1919 A.
1921 A, 427.
Kingsley, J. S. 1894 A, 639.
1925 A, 105, 225, figs. 113, 236.
Klein, E. F. 1879 A, 69, 70, 107.
1884 A, 132, 148, 156, 169, 228, 242, pl. ii.
1885 A, 212, 241.
1886 A, 224, 258, 292.
Kner, R. 1861 A, 245.
Köstlin, O. 1844 A.
Kolzoff, N. K. 1896 A, 515, fig. 2.
Lebedinsky, N. G. 1917 A, 315.
Leunis and Ludwig 1883 A, 748.
Locy, W. A. 1894 A, 179.
McMurrich, J. P. 1883 A, 634.
Masterman, A. T. 1913 A, 1-111, pls. i-iv ("salmon").
Meek, A. 1916 A, 112.
Mivart, St. G. 1879 B, 540, fig. 10 ("salmon").
Noorden, C. 1883 A, 235, pl. x.
Norman, E. W. 1926 A, figs. 41, 52.
Owen, R. 1845 B, 143, pl. xlviii, fig. 9.
1868 A, 907.
Paget and Savage 1916 A, 258 ("salmon").
Parker, W. K. 1879 C, 341 ("salmon").
Parker and Haswell 1897 A, 183, figs. 806-822.
Pehrson, T. 1922 A, 9.
Pychlau, W. 1908 A, 693, pls. xxv, xxvi.
Rauther, M. 1913 A, 1065, figs. 12-14, 28.
Reynolds, S. H. 1897 A, 87, 95, 131.
Richardson, J. 1836 A, 137.
Sagemehl, M. 1884 A, 78 ("lachse").
Schauinsland, H. 1906 A.
Schleip, W. 1904 A, 334.
Schmalhausen, J. J. 1912 A, 545, 570, pls. xvi, xviii.
1913 C, pls. ii, v.
Schmid-Monnard, C. 1883 A, 101, pls. vi, vii.
Sewertzoff, A. N. 1926 D, 87, figs. 17, 18.
Siebenrock, F. 1901 A, 108.
Sörensen, W. 1897 A, 180.
Stannius, H. 1849 A, 538.
1854 A.
Stöhr, P. 1882 A, 76, pls. ii, iii.
Swinnerton, H. W. 1905 A, 364, pl. xxiii.
Taylor, H. F. 1916 A, 298.
Thilo, O. 1896 A, 342 ("lachs").
1913 A, 293 ("lachs").
Tichomirow, A. 1885 A, 533.
Turnbull, H. 1909 A, 1095, 1119, 1175, fig.
Uhlmann, E. 1921 A, 303, 317, 324.
Vogel, R. 1909 A, 505.
Wagner, R. 1843 A.
Wallace, A. R. 1876 A, ii, 447.
Walther, J. 1882 A, 75 ("lachse").
Willcox, M. A. 1899 A, 153.
Williamson, W. C. 1851 A, 694.
Winslow, G. M. 1898 A, 184.
Zittel and Koken 1911 A, 121.
Zittel and Schlosser 1923 A, 126, fig. 23.

Salmo salar Linn.

Linnæus, C. 1758 A, 308.
Allis, E. P. 1909 A, 214.
Boulenger, G. A. 1917 D, 1041.
Cockerell, T. D. A. 1913 B, 125.
Collinge, W. E. 1895 B, 290, pl. xx, fig. 15.
Dawson, J. W. 1894 C, 267 (This species?).
Esdaile, P. C. 1912 A, 6 pls.
1913 A, 1 ("salmon").
Frost, G. A. 1925 A, 157, pl. xii.
Gill, T. 1885 C, 158, fig. 99.
Harrison, R. G. 1893 A, 249, pls. xvi-xviii.
Jordan, D. S. 1885 A, 158, fig. 99.
1905 B, 546 ("salmon").
Jordan and Evermann 1896 A, 487.
Jordan and Gilbert 1882 A, 311.
Lambe, L. M. 1904 C, 39, 44.
McMurrich, J. P. 1910 A, 23.
Milne, J. A. 1913 A, 579, figs. 99-100.
Reynolds, S. H. 1897 A, 87, figs. 9-11.
Richardson, J. 1836 A, 145.
Schleip, W. 1904 A, 334, figs.
Shepherd, C. E. 1910 B, 295, pl. i, fig. 14.
1914 A, 267.
Stannius, H. 1854 A, 62.
Stöhr, P. 1882 A, 76, pls. ii, iii.
Willcox, M. A. 1899 A, 151.
Recent; North Atlantic, ascending rivers: Pleistocene (Late); Quebec.

ONCORHYNCHUS Suckley.. Type *Salmo gorbuscha* Walbaum.

Suckley, G. 1861, Ann. Lyc. Nat. Hist. N. Y., VII, 312.
Arldt, T. 1923 A, 503, 504.
Boulenger, G. A. 1917 B, 329.
Cockerell, T. D. A. 1913 B, 125.
Cunningham, J. T. 1886 A, 221.
1912 A, 310.
Dean, Gudger, Henn 1923 A, 630, 631.
Frost, G. A. 1925 A, 158, pl. xii.
Gilbert, C. H. 1913 A, 1.
1914 A, 1-22.
Gill, T. 1885 C, 151.
Jordan, D. S. 1885 A, 151.
1905 A, ii, 68, 583.
1907 A, 137.
1919 B, 299.
Jordan and Gilbert 1882 A, 304.
Jordan and Evermann 1896 A, 474.
McMurrich, J. P. 1910 A, 24.
1913 A, 9.
Meek, A. 1916 A, 126.
Milne, J. A. 1913 A, 572.
Regan, C. T. 1914 A, 407.

Oncorhynchus tschawytscha (Walbaum).

Walbaum, J. J. 1792, Artedi Piscium, 71 (Salmo).
Creaser, C. W. 1926 A, 21, 37.
Gilbert, C. H. 1913 A, pls. iv-vii; pl. viii, fig. 15, pl. ix; pl. x, fig. 18; pl. xiv, fig. 25.
1914 A, 11, pls. iv-x, xiv.
Gill, T. 1885 C, 152, fig. 98.
Hay, O. P. 1927 D, 241.
Jordan, D. S. 1885 A, 152, fig. 98.
1905 A, ii, 69, figs.
1907 A, 137, figs. 27-29. (This species?).
Jordan and Gilbert 1882 A, 306, 890 (O. tchawytcha).
Jordan and Evermann 1896 A, 479.
McMurrich, J. P. 1910 A, 24.
1913 A, 17, pls. v, vi; text-figs. 4, 5.
Milne, J. A. 1913 A, 572, 594, figs. 95, 96, 102, 109-111.
Recent; California to Alaska and China: Pleistocene (Equus beds); Oregon.

CRISTIVOMER Gill and Jordan. Type *Salmo namaycush* Walbaum.

Gill and Jordan. 1878, Bull. U. S. Nat. Mus., xii, 69.
Dean, Gudger, Henn 1923 A, 558.
Hussakof, L. 1916 B, 685.
Jordan, D. S. 1905 A, ii, 114, 565.
Jordan and Evermann 1896 A, 504.

Cristivomer namaycush (Walbaum).

Walbaum, J. J. 1782, Artedi Piscium, 68 (Salmo).
Allis, E. P. 1898 A, 434 (Salvelinus).
Baker, F. C. 1920 A, 282, 393.
Gill, T. 1885 C, 167 (Salvelinus).
Hay, O. P. 1923 A, 112, 344 (Christivomer, *errore*).
Hussakof, L. 1916 B, 685.
Jordan, D. S. 1905 A, ii, 114, fig. 78.
Jordan and Evermann 1896 A, 504.
Meek, A. 1916 A, 134.
Regan, C. T. 1914 A, 408, fig. 3 (Salvelinus).
Richardson, J. 1836 A, 179, pl. lxxxv (Salmo).
Recent; New England to Alaska in the larger lakes: Pleistocene (Sangamon); Wisconsin.

RHABDOFARIO Cope. Type *R. lacustris* Cope.

Hay, O. P. 1902 A, 392.
Dean, Gudger, Henn 1923 A, 628.
Jordan, D. S. 1919 B, 356.
Woodward, A. S. 1901 A, 160.

Rhabdofario lacustris Cope.

Hay, O. P. 1902 A, 392.
1927 D, 265, 268.
Jordan, D. S. 1905 A, ii, 62, 118.
1907 B, 286.
Pleistocene (Idaho); Idaho.

Rhabdofario sp. indet.

Hay, O. P. 1927 D, 104, 265. Pleistocene; Idaho.
Russell, I. C. 1902 A, 56. Pleistocene (Idaho); Idaho.

CYCLOLEPIS Geinitz. Type *C. agassizi* Geinitz.

Geinitz, H. B. 1868 A, 39, pl. ii, figs. 1, 2.
Cockerell, T. D. A. 1919 A, 181.
Jordan, D. S. 1919 B, 349.

Cyclolepis stenodinus Cockerell.

Cockerell, T. D. A. 1919 A, 181, pl. xxxv, fig. 16.
Upper Cretaceous (Fox Hills); Wyoming.

LEUCICHTHYOPS Cockerell. Type *L. vagans* Cockerell.

Cockerell, T. D. A. 1919 A, 180.

Leucichthyops vagans Cockerell.

Cockerell, T. D. A. 1919 A, 180, pl. xxxiv, fig. 13; pl. xxxv, figs. 1-15.
Reeside, J. B. 1923 A, 205 (Leuchichthyops).
1924 A, 12 (Leuchichthyops); pl. iii (Leucichthys).
Upper Cretaceous (Colorado group); Colorado, Wyoming.

ARGENTINIDÆ Gill.

Gill, T. 1885 C, 144.
Cockerell, T. D. A. 1913 B, 126.
Dean, Gudger, Henn 1923 A, 633 (Argentininæ).
Gill, T. 1862 B, 14 (Argentinæ).
1893 A, 131.
1893 B, 112.

Goode and Bean 1895 A, 51.
Jordan, D. S. 1885 A, 145.
1905 A, ii, 122.
1923 A, 124 (Argentinidæ, Osmeridæ).
Jordan and Evermann 1896 A, 519.
Jordan and Gilbert 1822 A, 288 (Argentininæ).
Meek, A. 1916 A, 138 (Argentinæ).
Regan, C. T. 1911 D, 320.
1913 D, 289.

MALLOTUS Cuvier. Type *Clupea villosa* Gmelin=*Salmo grœndlandicus* Bloch.

Hay, O. P. 1902 A, 392.
Arldt, T. 1923 A, 503.
Bronn, H. G. 1848 A, 700.
Cunningham, J. T. 1886 A, 221.
Dean, Gudger, Henn 1923 A, 688.
Duméril, A. 1856 A, 448 ("capelan").
Giebel, C. G. 1855 A, 109.
Gill, T. 1862 B, 15.
1885 C, 145.
Hoernes, R. 1886 A, 530.
Jordan and Evermann 1917 A, 130.
Jordan and Gilbert 1882 A, 291.
Leunis and Ludwig 1883 A, 751.
Stannius, H. 1854 A.
Wallace, A. R. 1876 A, ii, 447.
Woodward, A. S. 1901 A, 160.

Mallotus villosus (Müller).

Hay, O. P. 1902 A, 392.
Agassiz, L. 1848 B, 42.
Ami, H. M. 1897 A, 21, 22, 23.
1901 C, 53, 54.
Baker, F. 1920 A, 182.
Billings, E. 1856 A, 337, 345.
Boulenger, G. A. 1904 D, 568, fig. 344.
Bronn, H. G. 1849 A, 672.
Clapp, F. G. 1908 A, 522.
Coleman, A. P. 1901 B, 131.
1901 C, 224.
Cunningham, J. T. 1886 A, 224.
Dawson, G. M. 1857 A, 408, 415.
1863 F, 916.
Dawson, J. W. 1872 B, 402.
1872 C, 57, 98.
1894 C, 31, 58, 203, 265, 266, pl. viii, fig. 1.
Deecke, W. 1913 A, 84.
Fraser, C. M. 1915 A, 116, pl. x, figs. 36-39.
Gould, A. A. 1848 A, 64.
Haug, E. 1911 A, 1876.
Hay, O. P. 1923 A, 489.
1927 D, 283.
Johnston, W. A. 1917 A, 25 ("Mallotus").
Jordan, D. S. 1885 A, 145.
1905 A, ii, 126, fig. 85.
Jordan and Gilbert 1882 A, 291.
Lambe, L. M. 1904 C, 39, 44.
1914 F, 298.
Mantell, G. A. 1844 A, 670.
Meek, A. 1916 A, 138.
Owen, R. 1860 E, 150.
Packard, A. S. 1867 A, 244.
Richardson, J. 1836 A, 187 [Salmo (Mallotus)].
Wiman, C. 1913 A, 153.
Woodward, A. S. 1901 A, 161.
Zittel and Koken 1911 A, 121.
Zittel and Schlosser 1923 A, 126.
Zittel and Woodward 1902 A, 97.

Recent; Arctic Ocean south to Cape Cod and Alaska: Pleistocene; Canada, Maine: Pleistocene?; Greenland.

OSMERUS Linnæus. Type *O. eperlanus* Linnæus.

Linnæus, C. 1858 A, 310 (Osmeri).
Arldt, T. 1923 A, 503.
Boulenger, G. A. 1917 D, 1044.
Cockerell, T. D. A. 1913 B, 126.
Dean, Gudger, Henn 1923 A, 693.
Frost, G. A. 1925 A, 158, pl. xii.
Fryd, C. 1901 A, 33, fig.
Gill, T. 1862 B, 15.
1885 C, 144.
Goodrich, E. S. 1909 A, 394, 513.
Günther, A. C. 1866 A, 166.
Hammarsten, O. D. 1911 A, 669, pl. ix, figs. 2, 3; text-figs. 1, 2, 4, 11.
Jordan, D. S. 1885 A, 144.
1905 A, ii, 123, 127.
Jordan and Evermann 1896 A, 522.
Jordan and Gilbert 1882 A, 292.
Klein, E. F. 1885 A, 212.
Leunis and Ludwig 1883 A, 751.
Masterman, A. T. 1913 B, 113, pls. i, ii.
Meek, A. 1916 A, 140.
Shepherd, C. E. 1910 B, 292, pl. i, fig. 13.
Stannius, H. 1854 A.

Osmerus mordax (Mitchill).

Mitchill, S. L. 1815, Trans. Lit. and Phil. Soc. N. Y., i, 446 (Atherina).
Cockerell, T. D. A. 1913 B, 126.
Coleman, A. P. 1901 C, 224.
Dawson, J. W. 1894 C, 265.
Hay, O. P. 1923 A, 287.
Jordan, D. S. 1885 A, 144, fig. 93.
1905 A, ii, 123, fig. 82.
Jordan and Evermann 1896 A, 523.
Jordan and Gilbert 1882 A, 293.
Lambe, L. M. 1904 C, 39, 44.

Recent; coast and rivers from Virginia to Gulf of St. Lawrence: Pleistocene (Leda clay); Ontario.

Osmerus sp. indet.

Eastman, C. R. 1917 A, 293, pl. xviii, fig. 5 (This genus?). Tertiary; Montana.

Order INIOMI Gill.

Gill, T. 1884, Proc. U. S. Nat. Mus., vii, 350.
Frost, G. A. 1926 A, 466, pl. xx.
Gill, T. 1893 A, 131.
Gregory, W. K. 1907 D, 451, 484, 485, 487.
Hubbs, C. L. 1919 B, 61.
Jordan, D. S. 1905 A, i, 405; ii, 129, 576.
1907 B, 352.
1923 A, 153.
Jordan and Evermann 1896 A, 530.
Regan, C. 1909 B, 83.
1911 B, 120.
1911 D, 320.
Starks, E. C. 1904 C, 254.

Superfamily MYCTOPHOIDÆ, new form.

Frost, G. A. 1926 A, 467, pl. xx (Myctophoidea).
Regan, C. T. 1911 B, 121 (Myctophoidea).

MYCTOPHIDÆ Gill.

Gill, T. 1893 B, 113.
Unless otherwise indicated the writers below cited use for this family the name Scopelidæ.
Allis, E. P. 1909 A, 201.
Arambourg, C. 1921 A, 233 (Myctophum).
Arldt, T. 1907 D, 681.
1923 A, 517 ("scopeliden").
Bassani, F. 1905 A, 19.
Boulenger, G. A. 1904 D, 611, 755.
Dean, Gudger, Henn 1923 A, 514 (Myctophidæ).
Frost, G. A. 1926 A, 467 (Myctophidæ).
Gill, T. 1885 C, 139.
Goode and Bean 1895 A, 70 (Myctophidæ).
Goodrich, E. S. 1909 A, 399.
Günther, A. C. 1864 A, 393.
1880 A, 606.
1881 A, 692.
Jordan, D. S. 1885 A, 139.
1905 A, II, 132, 582 (Myctophidæ); 134 (Rhinellidæ).
1923 A, 155 (Myctophidæ); 128 (Rhinellidæ).
Jordan and Evermann 1896 A, 550 (Myctophidæ).
Jordan and Gilbert 1882 A, 279.
Klein, E. F. 1879 A, 105 (Scopelidæ).
1884 A, 135, 145, 226.
1885 A, 145, 212, 241.
1886 A, 222, 258, 292.
Meek, A. 1916 A, 412, 414.
Müller, J. 1845 A, 102, 136 (Scopelini).
Norman, E. W. 1926 A, 441.
Rauther, M. 1913 A, 1101.
Regan, C. T. 1911 B, 128 (Myctophidæ).
Sagemehl, M. 1884 A, 100 ("scopeliden").
Schlosser, M. 1917 A, 140, 143, 148 ("scopeliden").
Shepherd, C. E. 1916 A, 182, 184, 204, fig. 157 (Scopelus).
Siebenrock, F. 1901 A.
Stannius, H. 1854 A (Scopolini).
Woodward, A. S. 1901 A, ix, 6, 235.
Zittel and Koken 1911 A, 130.
Zittel and Schlosser 1923 A, 131.
Zittel and Woodward 1902 A, 99.

RHINELLUS Agassiz. Type *R. furcatus* Agassiz.

Agassiz, L. 1843 B (1844), ii, 260.
Hay, O. P. 1902 A, 397 (Ichthyotringa).
Davis, J. W. 1887 C, 607.
Hay, O. P. 1903 A, 94.
Hennig, E. 1912 A, 490.
Hussakof, L. 1916 C, 348 (Ichthyotringa).
Jordan, D. S. 1905 A, ii, 134.
1919 B, 217.
1923 A, 128, 155 (Rhinellus, Ichthyotringa).
Pictet and Humbert 1856 A, 44.
Woodward, A. S. 1901 A, ix, 265 (Ichthyotringa a syn.).
Zittel, K. A. 1890 A, 286.
Zittel, Eastman, etc. 1902 A, 99.
Zittel and Koken 1911 A, 130 (Ichthyotringa a syn.).
Zittel and Schlosser 1923 A, 131.
Zittel and Woodward 1902 A, 99 (Ichthyotringa a syn.).

Rhinellus tenuirostris (Cope).

Hay, O. P. 1902 A, 397 (Ichthyotringa).
1903 A, 94, pl. iv, figs. 7, 8.
Hussakof, L. 1908 A, 95.
Woodward, A. S. 1901 A, 269.
Upper Cretaceous (Niobrara); S. Dakota.

SARDINIUS Marck. Type *Osmerus cordieri* Agassiz.

Hay, O. P. 1902 A, 391.
Cockerell, T. D. A. 1919 A, 184.
Hay, O. P. 1903 A, 91 (Leptosomus; preoccupied).
1903 G, 695 (Leptosomus).
Woodward, A. S. 1901 A, 247.
Zittel and Koken 1911 A, 130.
Zittel and Schlosser 1923 A, 131.

Sardinius? blackburnii Cope.

Hay, O. P. 1902 A, 391.
Woodward, A. S. 1901 A, 248 (Sardinius?).
Oligocene?; South Dakota.

Sardinius? imbellis Hay.

Hay, O. P. 1903 A, 93, pl. iv, fig. 9.
Hussakof, L. 1908 A, 96.
Cretaceous (Niobrara); South Dakota.

Sardinius lineatus Cope.

Hay, O. P. 1902 A, 391.
1903 A, 92, pl. iv, fig. 6; pl. v, fig. 2 (Leptosomus).
Hussakof, L. 1908 A, 79 (Leptosomus).
Woodward, A. S. 1901 A, 248.
Cretaceous (Niobrara); South Dakota.

Sardinius nasutulus Cope.

Hay, O. P. 1902 A, 391.
1903 A, 91, pl. iv, figs. 4, 5 (Leptosomus).
Hussakof, L. 1908 A, 79 (Leptosomus).
Woodward, A. S. 1901 A, 248.
Cretaceous (Niobrara); South Dakota.

Sardinius percrassus Cope.

Hay, O. P. 1902 A, 391.
1903 A, 92, pl. v, fig. 3 (Leptosomus).
Hussakof, L. 1908 A, 79 (Leptosomus).
Woodward, A. S. 1901 A, 248.
Cretaceous (Niobrara); South Dakota.

PARALEPIDIDÆ Gill

Gill, T. 1872 C, 16.
Bonaparte, C. L. 1840 A, 302 (Paralepidini).
Dollo, L. 1908 A, 59 (Paralepidæ).
Gill, T. 1885 C, 139.
Goode and Bean 1895 A, 97.
Jordan, D. S. 1905 A, ii, 136 (Paralepidæ).
1921 A, 250 (Paralepidæ).
1923 A, 154 (Paralepidæ).
Jordan and Evermann 1896 A, 599.
Jordan and Gilbert 1882 A, 276.
Regan, C. T. 1911 B, 125 (Sudidæ).

TROSSULUS Jordan. Type *T. exoletus* Jordan.

Jordan, D. S. 1921 A, 250.

Trossulus exoletus Jordan.

Jordan, D. S. 1921 A, 250, pl. viii, fig. *c*; pl. xxviii, fig. *a*.
Miocene (Monterey); California.

DRIMYS Jordan. Type *D. defensor* Jordan.

Jordan, D. S. 1925 B, 14.

Drimys defensor Jordan.

Jordan, D. S. 1925 B, 14.
Miocene (Monterey); California.

LESTICHTHYS Jordan. Type *L. porteousi* Jordan.

Jordan, D. S. 1921 A, 250.

Lestichthys porteousi Jordan.

Jordan, D. S. 1921 A, 250, pl. x, fig. *b*; pl. xxii, fig. *b*.
Miocene (Monterey); California.

Order HETEROMI Gill.

Gill, T. 1889 D, 1016.
Boulenger, G. A. 1904 D, 621.
Dean, Gudger, Henn 1923 A, 369, 572, 643.
Frost, G. A. 1926 A, 466, 479, pl. xx.
Gill, T. 1889 C, 1016 (Lyopomi).
1893 A, 133.
Goode and Bean 1895 A, 162.
Goodrich, E. S. 1909 A, 416 (Notacanthiformes).
Gregory, W. K. 1907 D, 451, 482.
Jordan, D. S. 1905 A, i, 405; ii, 157.
1907 B, 376.
1923 A, 128.
Jordan and Evermann 1896 A, 612.
Meek, A. 1916 A, 186.
Regan, C. T. 1909 B, 82.
1912 B, 841, 844.

Suborder DERCETIFORMES.

Jordan, D. S. 1923 A, 128 (Hoplopleuri, Dercetiformes).

STRATODONTIDÆ Cope.

Hay, O. P. 1902 A, 387.
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 151, 281.
Cope, E. D. 1872 I, 348.
Cope, E. D. 1880 U, 146 ("stratodontidés").
Jordan, D. S. 1905 A, ii, 137.
1907 B, 360.
1923 A, 128.

STRATODUS Cope. Type *S. apicalis* Cope.

Hay, O. P. 1902 A, 387.
Cockerell, T. D. A. 1919 A, 184.
Dollo, L. 1892 F, 181.
Hennig, E. 1912 A, 490.
Storms, R. 1891 A, 151, 152.
Woodward, A. S. 1901 A, 188.
Zittel and Woodward 1902 A, 98.

Stratodus apicalis Cope.

Hay, O. P. 1902 A, 387.
Hussakof, L. 1908 A, 102.
Woodward, A. S. 1901 A, 189, 614.
Cretaceous (Niobrara); Kansas.

Stratodus oxypogon Cope.

Hay, O. P. 1902 A, 387.
1903 A, 80, text-figs. 66-68.
Hussakof, L. 1908 A, 102.
Woodward, A. S. 1901 A, 189.
Cretaceous (Niobrara); Kansas.

CIMOLICHTHYS Leidy. Type *C. levesiensis* Leidy.

Hay, O. P. 1902 A, 387 (Empo); 390 (Cimolichthys).
Cockerell, T. D. A. 1919 A, 184.
Cope, E. D. 1880 U, 147 (Empo).
Dollo, L. 1892 F, 181 (Empo); 182 (Cimolichthys).
Green, W. R. 1913 A, 73.
Hay, O. P. 1903 A, 81 (Empo).
Henning, E. 1912 A, 490.
Krause, P. G. 1901 A, 120.
Leriche, M. 1902 B, 140.
1906 C, 96.
Moodie, R. L. 1911 G, 278 (Empo).
Stephan, P. 1900 A, 340 (Empo).
Storms, R. 1891 A, 151 (Empo); 153 (Cimolichthys).
Stromer, E. 1917 A, 23.
Woodward, A. S. 1901 A, 221.
1912 A (1902), 43.
Zittel and Koken 1911 A, 126.
Zittel and Schlosser 1923 A, 131.
Zittel and Woodward 1902 A, 98 (Cimolichthys); 99 (Empo).

Cimolichthys contractus (Cope).

Hay, O. P. 1902 A, 387 (Empo).
Woodward, A. S. 1901 A, 228.
Upper Cretaceous (Niobrara); Kansas.

Cimolichthys lisbonensis (Stewart).

Hay, O. P. 1902 A, 38 (Empo).
Woodward, A. S. 1901 A, 228.
Upper Cretaceous (Lisbon shales); Kansas.

Cimolichthys merrillii (Cope).

Hay, O. P. 1902 A, 387 (Empo).
Woodward, A. S. 1901 A, 228.
Upper Cretaceous (Niobrara); Kansas.

Cimolichthys nepaholica (Cope).

Hay, O. P. 1902 A, 387 (Empo).
Cockerell, T. D. A. 1919 A, 184.
Cope, E. D. 1875 E, 230, 279, pls. xlix, fig. 9; pl. 1, fig. 8; lii, fig. 1; liii, figs. 3-5; pl. lix, figs. 1-9; pl. lxi, figs. 2-5 (Empo nepæolica).
Hay, O. P. 1902 B, 745 (Empo).
1903 A, 81, pl. i, fig. 4; text-figs. 69-72 (Empo).
Hussakof, L. 1908 A, 66, fig. 35.
Kruizinga, P. 1924 A, 299, 311 (Empo nepæolica).
Moodie, R. L. 1911 G, 278, pl. lx, pl. lxii, fig. 2 (Empo).
1913 A, 249 (Empo).
Priem, F. 1908 B, 66, 67 (C. nepæolica).
Woodward, A. S. 1901 A, 225, fig. 9.
Upper Cretaceous (Niobrara); Kansas, France.

Cimolichthys semianceps (Cope).

Hay, O. P. 1902 A, 387 (Empo).
1903 A, 84 (Empo).
Woodward, A. S. 1901 A, 228.
Upper Cretaceous (Niobrara); Kansas.

Cimolichthys sp. indet.

Lambe, L. M. 1916 A, 196. Upper Cretaceous (Pierre?); Manitoba.

DERCETIDÆ Cope.

Hay, O. P. 1902 A, 396.
Abel, O. 1921 A, 188 (Hoplopleuridæ).
Boulenger, G. A. 1904 A, 171.
1904 D, 623.
Cockerell, T. D. A. 1919 A, 184, 185.
Dean, Gudger, Henn 1923 A, 643.
Goodrich, E. S. 1909 A, 417.
Hay, O. P. 1903 G, 691.
Hennig, E. 1906 A, 173.
Hoernes, R. 1886 A, 556 (Hoplopleuridæ).
Jordan, D. S. 1905 A, ii, 136, 137.
Jordan, D. S. 1907 B, 359, 377.
1923 A, 128.
Regan, C. T. 1909 B, 83.
1911 B, 120.
Schlosser, M. 1917 A, 140.
Woodward, A. S. 1901 A, 6, 171.
1912 A (1903), 65.
Zittel and Koken 1911 A, 125.
Zittel and Schlosser 1923 A, 135.
Zittel and Woodward 1902 A, 97.

LEPTECODON Williston. Type *L. rectus* Willist.

Hay, O. P. 1902 A, 397.
Sauvage, H. E. 1901 B, 6 (Leptocodon).
1901 F, 77 (Leptocodon).
Schlosser, M. 1901 M, 479.
Woodward, A. S. 1901 A, 233.

Leptecodon rectus Willist.

Hay, O. P. 1902 A, 397.
Sauvage, H. E. 1901 B, 6 (Leptocodon).
1901 F, 77 (Leptocodon).
Schlosser, M. 1901 M, 479.
Woodward, A. S. 1901 A, 233.
Cretaceous (Niobrara); Kansas.

TRIÆNASPIS Cope. Type *T. virgulatus* Cope.

Hay, O. P. 1902 A, 397.
Cockerell, T. D. A. 1919 A, 185.
Hay, O. P. 1903 A, 89.
1903 G, 694.
Hennig, E. 1912 A, 490.
Hussakof, L. 1916 C, 348.
Jordan, D. S. 1919 B, 394.
Woodward, A. S. 1901 A, 187 (Leptotrachelus).

Triænaspis virgulatus Cope.

Hay, O. P. 1902 A, 397.
Cockerell, T. D. A. 1919 A, 185.
Hay, O. P. 1903 A, 89, pl. v, fig. 1.
1903 G, 691.

Jordan, D. S. 1919 B, 394 (Leptotrachelus virgatulus).

Woodward, A. S. 1901 A, 187 (Leptotrachelus). Upper Cretaceous (Niobrara); South Dakota.

Leptotrachelus Marck. Type *L. armatus* Marck.

Hay, O. P. 1902 A, 397.
Cope, E. D. 1880 U, 147.
Hay, O. P. 1903 A, 90.
1903 G, 694.
Hennig, E. 1912 A, 490.
Woodward, A. S. 1901 A, 173.
1912 A (1903), 68, pl. xvi, text-figs. 15, 16.
Zittel and Koken 1911 A, 125.
Zittel and Woodward 1902 A, 98.

Leptotrachelus longipinnis Cope.

Hay, O. P. 1902 A, 397.
1903 A, 90, pl. iv, fig. 3; pl. v, fig. 4.

Cockerell, T. D. A. 1919 A, 185.
Hussakof, L. 1908 A, 80.
Woodward, A. S. 1901 A, 187.
Cretaceous (Niobrara); South Dakota.

Leptotrachelus virgulatus (Cope).

Hay, O. P. 1902 A, 397 (Triænaspis).
Hussakof, L. 1908 A, 80.
Cretaceous (Niobrara); South Dakota.

HALOSAURIDÆ Günther.

Günther, A. C. 1868 A, 482.
Arldt, T. 1907 D, 657.
Boulenger, G. A. 1904 D, 623.
Carus, V. 1875 A, 579 (Halisauroidei).
Dean, Gudger, Henn 1923 A, 643.
Gregory, W. K. 1907 D, 483.
Goodrich, E. S. 1909 A, 417.
Günther, A. C. 1880 A, 665.
1881 A, 694.

Jordan, D. S. 1905 A, ii, 138, 158.
1919 B, 283.
1923 A, 128 (To Lyopomi).
Jordan and Evermann 1896 A, 606.
Meek, A. 1916 A, 186.
Rauther, M. 1913 A, 1102.
Regan, C. T. 1909 B, 82.
Woodward, A. S. 1901 A, 162.
Zittel and Schlosser 1923 A, 135.

Echidnocephalus Marck. Type *E. troscheli* Marck.

Marck, W. 1858, Zeitschr. deutsch, geol. Ges., x, 247.
Cockerell, T. D. A. 1919 A, 184.
Woodward, A. S. 1898 C, 259.
1901 A, 163.

Echidnocephalus? americanus Cockerell.

Cockerell, T. D. A. 1919 A, 184, pl. xxxvi, fig. 10.
Upper Cretaceous (Mesa Verde); Wyoming.

Echidnocephalus? pacificus Cockerell.

Cockerell, T. D. A. 1919 A, 185, pl. xxxvi, fig. 11.
Upper Cretaceous (Chico); California.

Order HAPLOMI Cope.

Cope, E. D. 1871 T, 452.
Hay, O. P. 1902 A, 398.
Abel, O. 1919 A, 157.
Arldt, T. 1923 A, 516 ("haplomen").
Boulenger, G. A. 1902 C, 389.
1904 A, 162, 168, 174.
1904 D, 605.
Cope, E. D. 1891 N, 22.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 683.
Dietz, P. A. 1917 A, 84.
Fowler, H. W. 1911 A, 166.
Frost, G. A. 1926 A, 464, 479, pl. xx.
Gill, T. 1885 C, 168.
1905 A, 659.
Goodrich, E. S. 1909 A, 397 (Esociformes).
Gregory, W. K. 1907 D, 451, 487.
Hubbs, C. L. 1919 B, 61, 66.

Jaekel, O. 1911 A, 92.
Jordan, D. S. 1885 A, 168.
1904 A, 598.
1905 A, ii, 189, 574.
1907 B, 408, 424, 764.
1923 A, 156.
Jordan and Gilbert 1882 A, 323.
Meek, A. 1916 A, 179.
Rauther, M. 1913 A, 1101.
Regan, C. T. 1909 B, 77, 83.
1911 D, 320 (Haplomi, Microcyprini).
1912 B, 841, 843.
Schlesinger, G. 1909 A, (147, 152).
Starks, E. C. 1901 A, 260.
1904 C, 254.
1916 A, 23.
Swinnerton, H. W. 1905 A, 378.
Whitehouse, R. H. 1910 B, 604.

Suborder Cyprinodontiformes, new form.

Frost, G. A. 1926 A, 475, pl. xxi (Mylocyprini, Pœcilioidea).
Gill, T. 1872 C, 15 (Cyprinodontoidea).
Jordan, D. S. 1923 A, 157 (Cyprinodontes).

Regan, C. T. 1909 B, 82 (Microcyprini).
1911 D, 322 (Pœcilioidea).
Sagemehl, M. 1891 A ("cyprinodonten").
Starks, E. C. 1904 C, 258 (Pœcilioidea).

CYPRINODONTIDÆ Owen.

Owen, R. 1846, 48.
Hay, O. P. 1902 A, 398 (Pœciliidæ).
Adams, A. 1854 A, 107 (Poeciliidæ).
Agassiz, L. 1838 A, 82 ("cyprinodonten").
1844 D, 142 ("cyprinodontes").
Allis, E. P. 1898 B, 95 (Cyprinodontides).
Arldt, T. 1907 D, 649.
1912 A, 690, 762.
1923 A, 518 ("cyprinodontiden").
Bonaparte, C. L. 1840 A, 53 (Pœcilidæ).
Boulenger, G. A. 1904 A, 169.
1904 D, 616, 637.
1917 B, 330.
1919 A, 44.
Bronn, H. G. 1849 A, 780, seq. (Cyprinodontes).
Carus, V. 1875 A, 572 (Cyprinodontes).
Cockerell, T. D. A. 1913 B, 141 (Pœciliidæ).
1915 A, 31 (Pœciliidæ).
Cope, E. D. 1871 T, 455.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 676.
Eastman, C. R. 1917 A, 290.
Fitzinger, L. J. 1873 A, 38 (Cyprinodontes).
Frost, G. A. 1926 A, 475.
Gaupp, E. 1898 B, 823 ("cyprinodontiden").
Giebel, C. G. 1855 A, 108 ("cyprinodontes").
Gill, T. 1885 C, 170.
Goodrich, E. S. 1909 A, 400.
Günther, A. C. 1866 A, 299.
Heckel, J. 1850 B, 146 ("poecilien").
Hoernes, R. 1886 A, 530 (Cyprinodontes).
Hubbs, C. L. 1919 B, 66 (Pœciliidæ).
Ihering, H. 1891 C, 25 ("cyprinodonten").
Jordan, D. S. 1885 A, 902.
Jordan, D. S. 1905 A, ii, 194, 586 (Pœciliidæ).
1907 B, 413 (Pœciliidæ).
1923 A, 157, 158.
Jordan and Gilbert 1882 A, 326.
Kindred, J. E. 1924 A, 423 ("cyprinodonts").
Leunis and Ludwig 1883 A, 741.
Lönnberg, E. 1902 A (Cyprinodontes).
Meek, A. 1916 A, 183.
Müller, J. 1845 A, 102, 136 (Cyprinodontes).
Norman, E. W. 1926 A, 441.
Nusbaum, J. 1908 A, 514 ("cyprinodonten").
Owen, R. 1845 B, 144 ("cyprinodonts").
Palacký, J. 1902 B, 150 ("cyprinodonten").
Rauther, M. 1913 A, 1101.
Regan, C. T. 1909 B, 84.
1911 D, 323.
1912 B, 841.
1913 C, 977 ("cyprinodonts").
1923 B, 457 ("cyprinodonts").
Sagemehl, M. 1883 A ("cyprinodonten").
1884 A, 100 ("cyprinodontiden").
Shepherd, C. E. 1914 A, 270.
Stannius, H. 1854 A (Cyprinodontes).
Starks, E. C. 1904 C, 259 (Pœcillidæ).
Stephan, P. 1900 A, 321 ("cyprinodontes").
Struck, W. 1915 A, 137, fig. 3 (Cyprinodon).
Uhlmann, E. 1921 A, 301.
Wagner, H. 1843 A ("cyprinodonten").
Wallace, A. R. 1876 A, ii, 450.
Woodward, A. S. 1901 A, ix, 7, 289.
Zittel and Koken 1911 A, 122.
Zittel and Schlosser 1923 A, 132.
Zittel and Woodward 1902 A, 100.

PARAFUNDULUS Eastman. Type *P. nevadensis* Eastman.

Eastman, C. R. 1917 A, 291.
Jordan, D. S. 1925 B, 43.

Parafundulus erdisi Jordan.

Jordan, D. S. 1924 B, 45, pls. I, J.
1925 B, 43.
Miocene (Lahontan); California.

Parafundulus nevadensis Eastman.

Eastman, C. R. 1917 A, 291, pl. xvi, fig. 2; pl. xvii; pl. xviii, fig. 3.
Jordan, D. S. 1924 B, 47.
Miocene (Lahontan); Nevada.

PROBALLOSTOMUS Cope. Type *P. longulus* Cope.

Hay, O. P. 1902 A, 394.
The systematic position of this genus is doubtful.

Proballostomus longulus Cope.

Hay, O. P. 1902 A, 394.
Woodward, A. S. 1901 A, 296.
Oligocene?; South Dakota.

GEPHYRURA Cope. Type *G. concentrica* Cope.

Hay, O. P. 1902 A, 398 (Gephyura, *errore*).
Arldt, T. 1907 D, 97 ("cyprinodontengattung").
Eastman, C. R. 1917 A, 290.
The systematic position of this genus is doubtful.

Gephyrura concentrica Cope.

Hay, O. P. 1902 A, 398 (Gephyura, *errore*).
Eastman, C. R. 1917 A, 290.
Woodward, A. S. 1901 A, 296.
Oligocene?; South Dakota.

Order SYNENTOGNATHI Gill.

Gill, T. 1856, Proc. Acad. Nat. Sci. Phila., 1856, 148.
Cope, E. D. 1871 T, 456, 457.
1872 C, 338.
Frost, G. A. 1926 A, 471, 480, pl. xx.
Gill, T. 1872 C, 14.
1885 C, 173.
Gregory, W. K. 1907 D, 491.
Hubbs, C. L. 1919 B, 61.
Jordan, D. S. 1905 A, ii, 209.
1907 B, 425.
1921 A, 253.
1923 A, 160.
Jordan and Evermann 1896 A, 707.

Jordan and Gilbert 1882 A, 371.
Regan, C. T. 1909 B, 78.
1911 E, 327, 331.
Regan, C. T. 1912 B, 842, 844.
Starks, E. C. 1904 B, 601 ("synentognaths").

FORFICIDÆ Jordan and Gilbert.

Jordan and Gilbert 1919 A, 36.
Jordan, D. S. 1921 A, 254.
1923 A, 160.

FORFEX Jordan. Type *F. hypuralis* Jordan.

Jordan, D. S. in Jordan and Gilbert 1919 A, 36.
Jordan, D. S. 1920 C, 568.
1921 A, 254.
1923 A, 160.
1925 B, 16.

Forfex hypuralis Jordan and Gilbert.

Jordan, D. S., in Jordan and Gilbert 1919 A, 36, pl. xiv, fig. 3.
1921 A, 254, pl. xxi, fig. *b*.
Miocene (Monterey); California.

BELTION Jordan. Type *B. peronides* Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 257.
1923 A, 161.
1925 B, 16.

Beltion peronides Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 257.
1925 B, 16, pl. v.
Miocene (Monterey); California.

ZELOTICHTHYS Jordan. Type *Zelotes alhambræ* Jordan.

Jordan, D. S. 1925 B, 44.
1921 A, 255 (Zelotes; preoccupied).

Zelotichthys alhambræ (Jordan).

Jordan, D. S. 1921 A, 254, pl. xii, fig. *a*, pl. xxvi, fig. *b*. (Zelotes).

Jordan, D. S. 1925 B, 44.
Miocene (Monterey); California.
In Jordan, D. S. 1921 A, plate xxvi*a* was intended for this species; plate xxvi*b* for *Zelosis hadleyi*.

ROGENIIDÆ Jordan.

Jordan, D. S. 1919 A, 8, 24.
1921 A, 253.
Jordan, D. S. 1923 A, 160.

ROGENIO Jordan. Type *R. solitudinis* Jordan.

Jordan, D. S. 1907 A, 128.
Hubbs, C. L. 1924 A, 177, 178.
Jordan, D. S. 1921 A, 253.

Rogenio solitudinis Jordan.

Jordan, D. S. 1907 A, 128, fig. 23.
1919 A, 5, 8, pl. ii, fig. 1.
1921 A, 253, pl. xvii, fig. *b*.

Jordan and Gilbert 1919 A, 24.
Miocene? (Soledad); California.

Rogenio vanclevei Jordan and Gilbert.

Jordan and Gilbert 1919 A, 24, pl. xxxi, fig. 3.
Jordan, D. S. 1921 A, 253, pl. xxv, fig. *a*.
Miocene (Monterey); California.

XENESTHIDÆ Jordan.

Jordan, D. S. 1923 A, 160.

XENESTHES Jordan. Type *X. velox* Jordan.

Jordan, D. S. 1907 A, 120.
Arldt, T. 1923 A, 500.

Xenesthes velox Jordan.

Jordan, D. S. 1907 A, 120, fig. 16.
Hubbs, C. L. 1924 A, 177.
Triassic; California.

Superfamily SCOMBERESOCOIDÆ, new form.

Frost, G. A. 1926 A, 471, pl. xx (Scombresocoidea).
Klein, E. F. 1884 A, 130, 135, 145, 190, 199, 229 (Scomberesoces).
Klein, E. F. 1885 A (Scomberesoces).
Regan, C. T. 1911 E, 331 (Scomberesocoidea, as suborder).

SCOMBERESOCIDÆ Richardson.

Richardson, J. 1846 A, 264.
The greater number of the authors quoted spell this name Scombresocidæ.
Abel, O. 1906 C, 84.
Arldt, T. 1907 D, 681.
1923 A, 673 ("scombresociden").
Bassoli, G. G. 1906 A, 37 (otoliths).
Boulenger, G. A. 1904 A, 175.
1904 D, 636, 637.
1917 B, 329.
1919 A, 44.
Carus, V. 1875 A, 551 (Scomberesoces).

Cockerell, T. D. A. 1913 B, 145.
Cope, E. D. 1872 C, 338.
Dean, Gudger, Henn 1923 A, 362, 582, 645.
Dietz, P. A. 1917 A, 86.
Dollo, L. 1889 E, 155.
Eastmann, C. R. 1911 C, 360.
Fitzinger, L. J. 1873 A, 36 (Scomberesoces).
Fryd, C. 1901 A, 25.
Gaupp, E. 1898 B, 823 ("scomberesoces").
Gill, T. 1885 C, 174 ("scomberesocines").
Goodrich, E. S. 1909 A, 402.
Gregory, W. K. 1907 D, 493.
Günther, A. C. 1866 A, 233.
1880 A, 620.
1881 A, 693.
Hoernes, R. 1886 A, 531 (Scomberesoces).
Hubbs, C. L. 1919 B, 66.
Ihering, H. 1891 C, 25 ("scomberesociden").
Jordan, D. S. 1904 A, 598.
1905 A, ii, 211 (Exocœtidæ, in part).
1907 B, 427 (Exocœtidæ, in part).
1923 A, 161.
Jordan and Evermann 1896 A, 724.
Jordan and Gilbert 1882 A, 371.
Klein, E. F. 1879 A, 66.
1884 A.
1885 A, 114, 154, 164, 179, 214, 246 (Scomberesoces).
1886 A, 207, 233, 262, 293 (Scomberesoces).
Leunis and Ludwig 1883 A, 742.
Meek, A. 1916 A, 199.
Müller, J. 1846 C, 170, 174 (Scomberesoces).
Norman, E. W. 1926 A, 441.
Nusbaum, J. 1908 A, 514 ("scomberosoces").
Owen, R. 1845 B, 131 (Scomberesox).
1866 A, 10.
Rauther, M. 1913 A, 1102.
Regan, C. T. 1911 E, 333.
Sagemehl, M. 1884 A, 100 ("scomberesociden").
Schlesinger, G. 1909 B.
Siebenrock, F. 1901 A, 108.
Stannius, H. 1854 A, 5, seq. (Scomberesoces).
Terra, P. 1911 A, 214.
Uhlmann, E. 1921 A, 301 (Scomberesoces).
Wallace, A. R. 1876 A, ii, 449.
Woodward, A. S. 1901 A, 356.
Zittel and Koken 1911 A, 122.
Zittel and Schlosser 1923 A, 133.
Zittel and Woodward 1902 A, 103.

SCOMBERESSUS Jordan. Type *Scomberesox acutillus* Jordan and Gilbert.

Jordan, D. S. 1920 C, 571.
1921 A, 257.

Scomberessus acutillus (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 37, pl. xiv, fig. 2. (Scomberesox).
Jordan, D. S. 1920 C, 571.
Jordan, D. S. 1921 A, 257, pl. xxvii, fig. *a*. Miocene (Monterey); California.

Scomberessus edwardsi (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 37, pl. xviii (Scomberesox)
Jordan, D. S. 1921 A, 257. Miocene (Monterey); California.

HEMILAMPRONITES Steinla. Type *H. steinlai* Geinitz.

Steinla, M. 1868, in Geinitz, H. B. 1868 A, 48, pl. iii, figs. 3, 4.
Cockerell, T. D. A. 1919 A, 185.
Jordan, D. S. 1919 B, 350.

Hemilampronites hesperius Cockerell.

Cockerell, T. D. A. 1919 A, 185, pl. xxxvi, fig. 13. Upper Cretaceous (Fox Hills); Colorado.

BELONIDÆ Gill.

Gill, T. 1872 C, 14.
Allis, E. P. 1909 A, 213 (Belone).
Bonaparte, C. L. 1840 A, 301 (Belonini).
Frost, G. A. 1926 A, 471, pl. xx.
Gill, T. 1885 C, 176.
Goodrich, E. S. 1909 A, 403 (Belonine).
Gregory, W. K. 1907 D, 492.
Hubbs, C. L. 1919 B, 66.
Jordan, D. S. 1905 A, ii, 210.
1907 B, 426.
Jordan, D. S. 1921 A, 257.
1923 A, 239.
1925 B, 16.
Klein, E. F. 1884 A, 145, 229, 246 (Belone).
1885 A, 114, 154, 177 (Belone).
Regan, C. T. 1911 E, 329, 331.
The genus *Beltion* was at one time referred to this family but was later assigned to the Forficidæ.

Superfamily EXOCŒTOIDÆ, new form.

Frost, G. A. 1926 A, 472, pl. xx (Exocœtoidea).
Regan, C. T. 1911 E, 331 (Exocœtoidea, as suborder).

HEMIRHAMPHIDÆ Jordan and Evermann.

Jordan and Evermann 1896 A, 718 (earliest?).
Arldt, T. 1923 A, 673 (Hemirhamphus).
Bassoli, G. G. 1906 A, 37, pl. i (Hemirhamphus, otoliths).
Cockerell, T. D. A. 1913 B, 145.
Dean, Gudger, Henn 1923 A, 683 (Hemirhamphus).
Frost, G. A. 1926 A, 472 (Hemirhamphus).
Gill, T. 1885 C, 174 (Hemirhamphinæ).
Gregory, W. K. 1907 D, 492 ("half-beaks").

Hubbs, C. L. 1919 B, 66.
Jordan, D. S. 1905 A, ii, 227.
1923 A, 161.
Jordan and Gilbert 1882 A, 372 (Hemirhamphinæ).
Klein, E. F. 1884 A, 130 (Hemirhamphus).
1885 A, 115, 155 (Hemirhamphus).
1886 A, 223 (Hemirhamphus).
Regan, C. T. 1911 E, 324.
Stannius, H. 1854 A (Hemirhamphus).

ZELOSIS Jordan and Gilbert. Type *Clupea hadleyi* Jordan and Gilbert.

Jordan and Gilbert 1920 A, 24.
Jordan, D. S. 1921 A, 256.
The position of this genus is uncertain.

Zelosis hadleyi (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 25, 29, pl. xiii (Clupea).
Jordan, D. S. 1921 A, 256, pl. xxvi, fig. *a*.
1925 B, 44.
Jordan and Gilbert 1920 A, 24, pl. xxix.
Miocene (Monterey); California.
In Jordan, D. S. 1921 A, fig. *a* of pl. xxvi was intended for this species; fig. *b* for *Zelotes alhambræ*.

ROGENITES Jordan. Type *Rogenio bowersi* Jordan.

Jordan, D. S. 1919 A, 8.

Rogenites bowersi Jordan.

Jordan, D. S. 1907 A, 130, fig. 24 (Rogenio).
Jordan, D. S. 1919 A, 5, 8, pl. ii, fig. 2.
1921 A, 255, pl. xx, fig. *a*.
Miocene? (Soledad); California.

RHOMURUS Jordan. Type *R. fulcratus* Jordan.

Jordan, D. S. 1919 A, 9.
The family relationships of this genus are uncertain.

Rhomurus fulcratus Jordan.

Jordan, D. S. 1919 A, 5, 9, pl. iv, figs. 3, 4; pl. v, fig. 1.
1921 A, 248.
1925 B, 44.
Miocene? (Soledad); California.

Order GADOMORPHI, new name.

Unless otherwise indicated the authors, as quoted, use for this order the name Anacanthini. Originally it included the flat fishes, etc.
Abel, O. 1919 A, 157.
Allis, E. P. 1909 A, 11, 197.
Arldt, T. 1907 D, 637.
1923 A, 673, 675 ("anacanthinen").
Boulenger, G. A. 1901 A, 265.
1902 B, 297.
1904 A, 176.
1904 D, 646.
Bridge, T. W. 1896 A, 558.
Carus, V. 1875 A, 551.
Cockerell, T. D. A. 1913 B.
Cope, E. D. 1872 C, 341.
Dietz, P. A. 1921 A, 456 (Gadiformes).
Gill, T. 1884 F, 167.
1885 C, 267.
Frost, G. A. 1926 A, 483, pl. xxii.
Goode and Bean 1895 A, 352.
Goodrich, E. S. 1909 A, 478 (Gadiformes).
Gregory, W. K. 1907 D, 498.
Günther, A. C. 1881 A, 688, 691.
Jordan, D. S. 1905 A, i, 405; ii, 532, 556.
1907 B, 739.
Klein, E. F. 1879 A, 103.
1884 A, 135, 145 (Anacanthini).
1885 A, 119, 141, 208, 238.
1886 A, 220, 256, 287 (Anacanthini).
Müller, J. 1846 C, 130, 177, 202.
Owen, R. 1866 A, 10.
Rauther, M. 1913 A, 1103.
Regan, C. T. 1903 B, 459, 464.
1909 B, 80.
1912 B, 839, 842, 848.
Stannius, H. 1854 A, 5, seq. (Anacanthini).
1891 A ("gadiden").
Steinmann, G. 1927 A, 77 (Gadiformes).
Stephan, P. 1900 A, 321 ("anacanthines").
Terra, P. 1911 A, 213 (Anacanthini).

Superfamily GADOIDÆ Gill.

Gill, T. 1863 B, 243 (As family name).
Dietz, P. A. 1917 A, 84 (Gadiformes).
1921 A, 433.
Gill, T. 1884 F, 170 (Gadoidea).
Günther, A. C. 1881 A, 691 (Gadoidei).
Klein, E. F. 1879 A, 67, 70, 75 (Gadoidei).
Owen, R. 1845 B, 161 ("gadoids").
Zittel and Schlosser 1923 A, 149 (Gadiformes).

GADIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 95, 117.
Abel, O. 1919 A, 47, 108, figs. 21, 24, 67.
Allis, E. P. 1903 B, 172 (Gadus).
1909 A, 213 (Gadus).
1915 A, 566 (Gadus).
Arldt, T. 1907 D, 655.
1921 A, 215 ("gadiden").
Arldt, T. 1922 F, 83.
1923 A, 676 ("gadiden").
Bassoli, G. G. 1906 A, 38, pl. i (otoliths).
Baudelot, E. 1873 A, 101, 205 ("gadoides").
Bonaparte, C. L. 1838 B, 132.
Boulenger, G. A. 1901 A, 265.
1902 B, 296.

Boulenger, G. A. 1904 D, 647, 740.
Bridge, T. W. 1896 A, 558.
Carus, V. 1875 A, 552 (Gadoidei).
Cockerell, T. D. A. 1913 B, 173.
Cope, E. D. 1872 C, 341.
Creaser, C. W. 1926 A, 32.
Cunningham, J. S. 1905 A.
Dean, Gudger, Henn 1923 A, 681.
Dietz, P. A. 1914 A, 139.
1921 A, 433.
Frost, G. A. 1926 A, 483, 489.
Gill, T. 1863 B, 243 (Gadoidæ).
1863 C, 229.
1872 C, 3.
1884 F, 170.
1885 C, 267.
Goode and Bean 1895 A, 352.
Gregory, W. K. 1907 D, 498.
Goodrich, E. S. 1909 A, 482.
Günther, A. C. 1862 A, 326.
1881 A, 691.
Hasse, C. 1872 A (Gadus).
Jordan, D. S. 1905 A, i, 290; ii, 522, 533.
1907 B, 740.
1921 A, 260.
1923 A, 163.
Jordan and Evermann 1898 A, 2531.
Jordan and Gilbert 1882 A, 794.
Klein, E. F. 1879 A, 70, 75, 115.
1884 A, 137, 145, 176, 224, 248.
1885 A, 119, 141, 174, 238.
1886 A, 207, 220, 256, 287 ("gadiden").
Koken, E. 1889 B, 117, 120.
Meek, A. 1916 A, 209.
Mummery, J. H. 1917 A, 256.
Newton, E. T. 1891 A, 93 (Gadus).
Norman, E. W. 1926 A, 407, 411, fig. 44.
Owen, R. 1845 B, 161 ("cod-tribe").
1848 B, 10, 90, figs. 1-5.
1866 A, 10, 93, figs. 75, 77-81 (Gadus).
Priem, F. 1914 B, 249, figs. 10-12 ("gadidarum"; "otolithus").
Rauther, M. 1913 A, 1102.
Regan, C. T. 1903 B, 460, 465.
Reynolds, S. H. 1897 A, 83, figs. 12, 13 (Gadus).
Röse, C. 1897 A, 29, 60, figs. 2-4, 17 (Merlucius, Gadus).
Sagemehl, M. 1883 A, 192 ("gadiden").
1884 A, 74 ("gadiden").
1891 A ("gadoiden").
Schlosser, M. 1917 A, 142, 143 ("gadiden").
Shepherd, C. E. 1910 B, 295 (Gadus).
1916 A, 178, 203.
Siebenrock, F. 1901 A.
Stadmüller, F. 1926 A, 162 (Gadus).
Stannius, H. 1842 C, 97 (Gadus).
1849 A, 539 (Gadus).
1854 A, 5, seq. (Gadoidei).
Starks, E. C. 1905 A, 755 (Gadus).
Stensiö, E. A. 1921 A, 155.
Stephan, P. 1900 A, 301, 340, 364, pl. vi, fig. 1 (Gadus, Lota).
Terra, P. 1911 A, 213.
Thomson, J. S. 1904 A, 1-109, pls. i-viii.
Trouessart, E. L. 1906 A, 212.
Uhlmann, E. 1921 A, 303 ("gadiden").
Weiler, W. 1922 A, 73 (otoliths).
Whitehouse, R. H. 1918 A, 140.
Woodward, A. S. 1901 A, 597.
Zittel and Koken 1911 A, 127.
Zittel and Schlosser 1923 A, 150.

ARNOLDITES Jordan. Type *Arnoldina iniistia* Jordan and Gilbert.

Jordan, D. S. 1923 A, 164.
Hubbs, C. L. 1924 A, 178.
Jordan and Gilbert 1919 A, 63 (Arnoldina, preoccupied).

Arnoldites iniistia (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 63, pl. xxvii, fig. 2 (Arnoldina).
Jordan, D. S. 1921 A, 262 (Arnoldina).
Pliocene; California.

ECLIPES Jordan and Gilbert. Type *E. veternus* Jord. and Gilbert.

Jordan and Gilbert 1919 A, 47 (Eclipes); 56 (Merriamina, type *M. ectenes*).
Jordan, D. S. 1921 A, 260.

Eclipes extensus Jordan.

Jordan, D. S. 1921 A, 261, pl. ix, fig. *c*.
Miocene (Monterey); California.

Eclipes manni Jordan.

Jordan, D. S. 1921 A, 260, pl. xii, fig. *b*; pl. xxxi, fig. *a*.
Jordan, D. S. 1925 B, 17.
Miocene (Monterey); California.

Eclipes veternus Jordan and Gilbert.

Jordan and Gilbert 1919 A, 47, pl. viii, fig. 4 (E. veternus); 56, pl. xxvi, figs. 1-3 (Merriamina ectenes).
Jordan, D. S. 1921 A, 260, pl. xxxi, fig. *b*.
Jordan and Gilbert 1920 A, 41.
Miocene (Monterey); California.

MACROURIDÆ Jordan and Evermann.

Jordan and Evermann 1898 A, 2561.
Boulenger, G. A. 1904 D, 647, 702 (Macruridæ).
Cockerell, T. D. A. 1913 B, 173, pl. xi, fig. 48 (Macruridæ).
Dean, Gudger, Henn 1923 A, 688 (Macruridæ).
Frost, G. A. 1926 A, 483, pl. xxii (Macrurus).
Gill, T. 1885 C, 275 (Macruridæ).
Günther, A. C. 1862 A, 390 (Macruridæ).
Jordan, D. S. 1923 A, 162.
Jordan and Gilbert 1882 A, 810 (Macruridæ).
Shepherd, C. E. 1916 A, 203 (Macrurus).

BOLBOCARA Jordan. Type *B. gyrinus* Jordan.

Jordan, D. S. 1927 B, 94.

Bolbocara gyrinus Jordan.

Jordan, D. S. 1927 B, 94.
Upper Miocene (Lompoc); California.

Order MUGILOMORPHI, new name.

Suborder MUGILIFORMES Günther.

Günther, A. C. 1880 A, 499.
Unless otherwise indicated the authors, as cited, use for this suborder the term Percesoces.
Hay, O. P. 1902 A, 398.
Abel, O. 1919 A, 157.
Arldt, T. 1923 A, 500, 673.
Boulenger, G. A. 1901 D, 348.
1904 A, 162, 174.
1904 D, 636.
1919 A, 44 ("percésoces").
Cockerell, T. D. A. 1910 E, 48.
1913 B, 136.
Cope, E. D. 1871 T, 456.
1891 N, 25.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 694.
Derjugin, K. 1909 A.
1910 A, 620.
Dietz, P. A. 1917 A, 86.
Dollo, L. 1909 B (138).
Fowler, H. W. 1911 A, 169.
Gill, T. 1873 F, 10 (>Mugiloidea).
1885 C, 176.
Goodrich, E. S. 1909 A, 419 (Mugiliformes).
Gregory, W. K. 1907 D, 452, 497.
Günther, A. C. 1881 A, 690 (Mugiliformes).
Hubbs, C. L. 1919 B, 66.
Jaekel, O. 1911 A, 94.
Jordan, D. S. 1904 A, 598.
1905 A, ii, 215, 585.
1907 B, 424, 432, 765.
1923 A, 177.
Jordan and Hubbs 1919 A, 6.
Meek, A. 1916 A, 199.
Regan, C. T. 1903 B, 460.
1909 B, 79 (Percesoses, Mugiloidei).
1912 B, 842, 846.
1913 B, 111 (Mugiloidea).
Schlesinger, G. 1909 A (147, 151).
Stannius, H. 1854 A (Mugiloidei).
Starks, E. C. 1916 A, 26.
Whitehouse, R. H. 1910 B, 606.
Woodward, A. S. 1898 B, 120.
1901 A, 347.
Zittel and Schlosser 1923 A, 135 (Mugiliformes).

ATHERINIDÆ Bonaparte.

Bonaparte, C. L. 1838 B, 132.
Arldt, T. 1907 D, 640.
1923 A, 673 ("atheriniden").
Baudelot, E. 1873 A, 101 ("athérines").
Boulenger, G. A. 1904 D, 637, 639.
1917 B, 329.
1919 A, 44.
Cockerell, T. D. A. 1910 E, 47.
1913 B, 146.
Cope, E. D. 1871 T, 457.
1872 C, 328, 338.
Dean, Gudger, Henn 1923 A, 645.
Gill, T. 1885 C, 178.
Goodrich, E. S. 1909 A, 419.
Günther, A. C. 1861 A, 391.
1880 A, 500.
1881 A, 690.
Hubbs, C. L. 1926 A, 64.
Hubbs, C. L. 1905 A, I, 290; II, 215.
Jordan, D. S. 1907 A, 131.
1921 A, 268.
1923 A, 177.
Jordan and Evermann 1896 A, 788.
Jordan and Gilbert 1882 A, 404.
Jordan and Hubbs 1919 A, 5, 7.
Klein, E. F. 1879 A, 99.
1884 A, 135, 221.
1885 A, 109, 112, 140.
1886 A, 213, 249, 283 (Atherina).
Meek, A. 1916 A, 203.
Owen, R. 1845 B, 120.
Pouchet, G. 1878 A, 54, figs. (Atherina).
Regan, C. T. 1912 B, 847.
Shepherd, C. E. 1916 A, 204.
Siebenrock, F. 1901 A.
Woodward, A. S. 1901 A, 358.

ZANTECLITES Jordan and Gilbert. Type *Z. hubbsi* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 39.
Hubbs, C. L. 1924 A, 178.
Jordan, D. S. 1921 A, 268.
Jordan and Hubbs 1919 A.

Zanteclites hubbsi Jordan and Gilbert.

Jordan and Gilbert 1919 A, 39, pl. xv, fig. 3; pl. xvi.
Jordan, D. S. 1921 A, 268, pl. xxix.
1925 B, 44.
Miocene (Monterey); California.

SPHYRÆNIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 90, 102.
Hay, O. P. 1902 A, 399.
Agassiz, L. 1844 D, 142 ("sphyrænöides").
1845 B, 300 ("sphyrænoides").
Arldt, T. 1907 D, 151, 280.
1923 A, 674 ("sphyræniden").
Bonaparte, C. L. 1833 B, 1197.
1838 B, 133.

Boulenger, G. A. 1904 A, 175.
1904 D, 642.
1917 B, 329.
1919 A, 44.
Bridge, T. W. 1896 A, 569.
Carus, V. 1875 A, 543 (Sphyrænoidei).
Cockerell, T. D. A. 1913 B, 146.
Cunningham, J. T. 1912 A, 246, 247.
Cuvier, G. 1815 A, 110 ("sphyrènes").
Dean, Gudger, Henn 1923 A, 589, 645.
Dietz, P. A. 1917 A, 86.
Fitzinger, L. J. 1873 A, 35 (Sphyrænæ).
Fowler, H. W. 1911 A, 169.
Giebel, C. G. 1855 A, 104 (Spharænoidei).
Goodrich, E. S. 1909 A, 419.
Gudger, E. W. 1918 A, 100.
Hoernes, R. 1886 A, 537.
Jordan, D. S. 1905 A, ii, 222, 593.
Jordan, D. S. 1907 B, 437.
1923 A, 178.
Jordan and Gilbert 1882 A, 410.
Jordan and Hubbs 1919 A, 6.
Klein, E. F. 1879 A, 91.
1884 A, 135.
1885 A, 109, 199.
Leunis and Ludwig 1883 A, 696.
Meckel, J. F. 1825 A (Sphyræna).
Meek, A. 1916 A, 207.
Owen, R. 1866 A.
Regan, C. T. 1912 B, 846.
Schlosser, M. 1917 A, 142 ("sphyraeniden").
Schubert, R. J. 1906 A, 650.
Terra, P. 1911 A, 217.
Wallace, A. R. 1876 A, ii, 429.
Woodward, A. S. 1901 A, 365.
Zittel and Schlosser 1923 A, 136.

Sphyræna Röse. Type *Esox sphyræna* Linn.

Röse, A. F. 1793, Synonymia Nom. Pisc., ed. ii, 112.
Hay, O. P. 1902 A, 400.
Abel, O. 1912 F, 513.
Allis, E. P. 1909 A, 214.
Arldt, T. 1923 A, 674.
Boulenger, G. A. 1904 D, 642.
1919 A, 44.
Bridge, T. W. 1896 A, 569, pl. xxiii.
Bronn, H. G. 1848 B, 1171.
1849 A, 675.
Cockerell, T. D. A. 1913 B, 146.
Dean, Gudger, Henn 1923 A, 395, 574, 645.
Gervais, P. 1859 A, 514, pl. lxviii.
Giebel, C. G. 1855 A, 104, pl. xliii, fig. 9.
Gudger, E. W. 1918 A, 55, 101, pls. i-vii.
Jordan, D. S. 1905 A, ii, 223, 593.
1907 B, 438.
1917 A, 43, 52, 58.
Jordan and Evermann 1917 A, 43, 52, 58.
Jordan and Gilbert 1882 A, 410.
Klein, E. F. 1879 A, 91.
1884 A, 139, 181, 184, 199, 212, pl. ii.
1885 A, 111, 135, 168, 228.
Klein, E. F. 1886 A, 210, 242, 279, figs. 19, 39.
Leunis and Ludwig 1883 A, 696.
Owen, R. 1845 B, 126, pl. liii.
1848 B, 46.
1866 A.
1868 A, 909.
Priem, F. 1914 B, 255, fig. 22 ("otolithus").
Ridewood, W. G. 1896 A, 384, 386.
1904 A, 59.
Schlesinger, G. 1909 A (144).
Starks, E. C. 1899 B, 114.
Stephan, P. 1898 A, 359.
1900 A, 314, 409.
Woodward, A. S. 1901 A, 366.

Sphyræna major Leidy.

Hay, O. P. 1902 A, 400.
Woodward, A. S. 1901 A, 368.
Pleistocene; South Carolina.

Sphyræna sp. indet.

Gidley, J. W. 1926 F, 192, pl. lxxi (Saurodon. Genus doubtful). Upper Cretaceous (Ripley): Tennessee.

Order SELENICHTHYES Boulenger.

Boulenger, G. A. 1904 A, 173.
Boulenger, G. A. 1904 D, 627.
Goodrich, E. S. 1909 A, 475.
Frost, G. A. 1927 A, 439 (Allotriognathi).
Jordan, D. S. 1905 A, ii, 243.
1907 B, 458.
1921 A, 265.
1923 A, 166.
Regan, C. T. 1909 B, 80 (Lamproidei).

Suborder Lampridiformes Goodrich.

Goodrich, E. S. 1909 A, 475.

LAMPRIDIDÆ Gill.

Gill, T. 1872 C, 9.
Boulenger, G. A. 1904 D, 627, 628.
Dean, Gudger, Henn 1923 A, 590, 644.
Frost, G. A. 1927 A, 439 (Lampridæ).
Jordan, D. S. 1905 A, ii, 10, 243.
Jordan, D. S. 1907 B, 459.
1921 A, 265 (Lampridæ).
1923 A, 166 (Lampridæ).
Jordan and Evermann 1896 A, 953.
Jordan and Gilbert 1882 A, 453.

Diatomœca Jordan and Gilbert. Type *D. zatima* Jord. and Gilbert.

Jordan and Gilbert 1919 A, 58.
Jordan, D. S. 1920 C, 569.
Jordan, D. S. 1921 A, 264.
Jordan and Gilbert 1920 A, 50

Diatomœca zatima Jordan and Gilbert.

Jordan and Gilbert 1919 A, 58, pl. xxiv, fig. 3.
Jordan, D. S. 1920 B, 472, fig. 3 (Lampris).
Jordan, D. S. 1921 A, 265, pl. 4, fig. *b*; pl. xxxii.
1927 B, 90.
Jordan and Gilbert 1920 A, 40, pl. xix.
Miocene (Monterey); California.

LAMPRIS Retzius. Type *Zeus guttatus* Brünnich.

Retzius, A. J. 1799, Nya Handlung, iii, 91.
Boulenger, G. A. 1904 D, 629.
Dean, Gudger, Henn 1923 A, 589, 644.
Frost, G. A. 1927 A, 439, pl. viii.
Goodrich, E. S. 1909 A, 475.
Günther, A. C. 1860 A, 415, 416.
Hubbs, C. L. 1924 A, 178.
Jordan, D. S. 1905 A, ii, 244, fig. 194.
1907 B, 132, 458, figs. 84, 363.
Jordan, D. S. 1920 B, 470.
1921 A, 266.
1923 A, 173.
Jordan and Evermann 1896 A, 954.
1917 A, 54.
Because of the close relationship of *Lampris* to *Diatomœca* citations to the literature of the former are given.

Order THORACOSTEI Swinnerton.

Swinnerton, H. H. 1902 A, 585 (March).
Hay, O. P. 1902 A, 396 (Phthinobranchii. June 9).
Boulenger, G. A. 1902 A, 151 (Catosteomi. August).
1904 D, 626 (Catosteomi).
Dietz, P. A. 1917 A, 87 (Cateostomi).
Eastman, C. R. 1911 C, 360.
Goodrich, E. S. 1909 A, 410 (Gasterosteiformes).
Gregory, W. K. 1907 D, 452, 493 (Thoracostraci).
Jordan, D. S. 1903 A, 136 (Phthinobranchii).
1905 A, ii, 227-240 (Phthinobranchii).
1907 B, 442 (Phthinobranchii).
Rauther, M. 1913 A, 1102 (Catosteomi).
Regan, C. T. 1909 B, 78, 84.
1912 B, 845.
Whitehouse, R. H. 1910 B, 605 (Catosteomi).
Zittel and Schlosser 1923 A, 133 (Gasterosteiformes).

Suborder GASTEROSTEIFORMES Gill.

Gill, T. 1872 C, 13.
Unless otherwise indicated the writers, as cited, use for this group the name ***Hemibranchii***.
Hay, O. P. 1902 A, 396.
Allis, E. P. 1909 A, 195.
Boulenger, G. A. 1902 A, 149.
Cope, E. D. 1871 T, 456.
1891 N, 25.
Dean, Gudger, Henn 1923 A, 550, 589, 644.
Gill, T. 1884 E, 154.
1885 C, 280.
Goodrich, E. S. 1909 A, 410-412 (Gasterosteiformes).
Gregory, W. K. 1907 D, 452.
Günther, A. C. 1880 A, 504 (Gasterosteiformes).
Hubbs, C. L. 1919 B, 61.
Jordan, D. S. 1904 A, 598.
1907 B, 442, 765.
1923 A, 173.
Jordan and Gilbert 1882 A, 387.
Meek, A. 1916 A, 187.
Regan, C. T. 1912 B, 845 (Gastrosteoidei).
1913 A, 172, 182 (Gastrosteoidea).
Starks, E. C. 1902 A, 619, 623.
1904 B, 601 ("hemibranchs").
Whitehouse, R. H. 1905 B, 605.
Woodward, A. S. 1901 A, xi, 369.

GASTEROSTEOIDÆ, new form.

Gill, T. 1872 C, 13 (Gasterosteoidea).
1884 E, 154 (Gasterosteoidea).
Starks, E. C. 1902 A, 623 (Gasterosteoidea).

GASTEROSTEIDÆ Bonaparte.

Bonaparte, C. L. 1838 B, 133.
Hay, O. P. 1902 A, 397.
Abel, O. 1912 F, 565 (Gastrosteidæ).
Arldt, T. 1912 A, 760.
1923 A, 520 ("gasterosteiden").
Bonaparte, C. L. 1840 A, 56.
Boulenger, G. A. 1902 A, 149, 151 (Gastrosteidæ).
1904 A, 173 (Gastrosteidæ).
1904 D, 629 (Gastrosteidæ).
1917 B, 330.
Carus, V. 1875 A, 543 (Gasterosteidei).
Cope, E. D. 1871 T, 457.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 644.
Dietz, P. A. 1917 A, 87.
Eigenmann, C. H. 1887 A, 233.
Fitzinger, L. J. 1873 A, 34.
Fryd, C. 1901 A, 24 (Gastrosteidæ).
Gill, T. 1875 B, 252.
1884 E, 155, 157.
1885 C, 280.
Goetsch, W. 1920 A, 473 ("gasterosteiden").
Goodrich, E. S. 1909 A, 412.
Günther, A. C. 1881 A, 691.
Heilprin, A. 1887 A, 68.
Hoernes, R. 1886 A, 537.
Jordan, D. S. 1905 A, ii, 228, 571.
1907 B, 443.
1923 A, 173.
Jordan and Gilbert 1882 A, 392.
Kiaer, J. 1924 A, 104.
Klein, E. F. 1886 A, 274 (Gasterostei).
Leunis and Ludwig 1883 A, 698 (Gastrosteidæ).
Meek, A. 1916 A, 187.
Owen, R. 1866 A, 193 (Gasterostei).
Rauther, M. 1913 A, 1102.

Regan, C. T. 1909 B, 84 (Gastrosteidæ).
1913 A, 169, 172 (Gastrosteidæ).
Siebenrock, F. 1901 A, 107.
Starks, E. C. 1902 A, 619, 624, 626.
Trouessart, E. L. 1906 A, 212.
Wallace, A. R. 1876 A, ii, 424.
Whitehouse, R. H. 1910 B, 606.
Woodward, A. S. 1901 A, xi, 370.

GASTEROSTEUS Linn. Type *G. aculeatus* Linn.

Linnæus, C. 1758 A, 295.
Hay, O. P. 1902 A, 397.
Abel, O. 1912 F, 104, 571, 569.
1922 F, 80.
Allis, E. P. 1909 A, 213.
1915 A, 566.
1918 A, 243.
Agassiz, A. 1877 A, 121, pl. ii, fig. 13.
Arldt, T. 1923 A, 521.
Bardeleben, K. 1901 A, 28.
Baudelot, E. 1873 A, 94.
Bertin, L. 1921 A, 143.
1921 B, 623.
Born, G. 1827 A, 187.
Boulenger, G. A. 1893 C, 228.
1902 A, 149.
1904 D, 630.
Brandt, J. F. 1865 A, 26.
Carlsson, A. 1894 A, 228.
Cuvier, G. 1805 A.
Dean, Gudger, Henn 1923 A, 681.
Derjugin, K. M. 1909 A.
1910 A, 616.
Edgeworth, F. H. 1926 A, 187.
Eigenmann, C. H. 1887 A, 233.
Fryd, C. 1901 A, 24.
Ganin, M. 1880 A, 143.
Gaupp, E. 1911 A, 414.
Geoffroy St. Hilaire, G. 1807 B, 414.
Gill, T. 1884 E, 158.
1885 C, 281, fig. 156.
Goetsch, W. 1915 A, 460.
1920 A, 13, 462, 473, pl. xx.
Goodrich, E. S. 1909 A, 510, figs.
Hague, F. 1924 A, 276.
Hase, A. 1907 A.
Hay, O. P. 1907 C, 271.
Heilprin, A. 1887 A, 68, 288.
Hubbs, C. L. 1926 A, 63.
Huxley, T. H. 1859 D, 407, figs. 7, 8.
1859 H, 33, pl. iii, figs. 1-4.
1863 F, 191, fig. 25.
Jordan, D. S. 1905 A, ii, 231, 571.
1907 A, 131 (Merriamella, type *M. doryssa* Jordan).
1907 B, 446.
1910 C, 635.
Jordan and Evermann 1896 A, 746.
1917 A, 13.
Jordan and Gilbert 1882 A, 393.
Jungerson, H. F. E. 1910 A, 353.
Kiaer, J. 1924 A, 104.
Kindred, J. E. 1921 A, 427.
1924 A, 422.
Klein, E. F. 1884 A, 135, 145, 181, 203, 234, 246.
1885 A, 118, 133, 235.
1886 A, 217, 253, 274.
Kner, R. 1862 A, 61.
Leunis and Ludwig 1883 A, 698 (Gastrosteus).
Mayer, A. F. 1862 A, 110.
Mayhoff, H. 1914 A, 403.
Meckel, J. F. 1825 A.
Noorden, C. 1883 A, 235.
Norman, E. W. 1926 A, 401, fig. 53.
Owen, R. 1845 B, 91.
1868 A, 881.
Pehrson, T. 1922 A.
Pouchet, G. 1878 A, 35, 145.
Prince, E. E. 1885 A, 487, pl. xiv.
Regan, C. T. 1909 C, 435.
1910 B, 533.
Ridewood, W. G. 1904 A, 63 (Gastrosteus).
Roth, F. 1920 A, 513.
Ryder, J. 1885 E, 94.
1885 F, 415.
1886 A, 75.
Schauinsland, H. 1906 A.
Schmalhausen, J. J. 1913 A, 12.
Schmid-Monnard, C. 1883 A, 127, pl. ix.
Solger, B. 1880 A, 378, 388.
Starks, E. C. 1902 A, 622, 626, fig. 1.
1916 A, 24.
Swinnerton, H. H. 1902 A, 503, pls. xxviii-xxxi.
1905 A, 319.
1905 B, 369, pl. xxiii.
1911 A, 452 ("sticklebacks").
Thilo, O. 1879 A, 5, pl. i.
1896 A, 306, pl. viii.
1896 B, 100.
1898 B, 86.
Uhlmann, E. 1921 A, 305.
Ussow, S. 1900 A, pls. i-iv.
Wagner, R. 1843 A.
Whitehouse, R. H. 1910 B, 605.
Wilder, B. 1876 A, 166.

Gasterosteus aculeatus bispinosus Walbaum.

Walbaum, J. J. 1792, Artedi Pisc., 450 (G. bispinosus).
Hay, O. P. 1902 A, 397 (G. bispinosus).
Ami, H. M. 1901 C, 54 ("G. sp. indet." This species?).
Bertin, L. 1921 B, 623 (G. aculeatus).
Dawson, J. W. 1872 B, 403 (Gasterosteus).
1872 C, 57, 99 (Gasterosteus).
1894 C, 203, 267, pl. viii, fig. 2 (G. aculeatus?).
Coleman, A. P. 1901 C, 224 (G. aculeatus).
Hay, O. P. 1923 A, 287 (G. aculeatus).
Jordan and Evermann 1896 A, 748 (G. bispinosus).
Lambe, L. M. 1904 C, 39, 44 (G. bispinosus).
Regan, C. T. 1909 C, 435 (G. aculeatus).
Roth, F. 1920 A, 513 (G. aculeatus).
Recent; Labrador to New Jersey: Pleistocene (Leda clay); Ontario.

Gasterosteus doryssus Jordan.

Jordan, D. S. 1907 A, 131, figs. 25, 26 (Merriamella).
Eastman, C. R. 1917 A, 291 (G. doryssus).

Hay, O. P. 1907 C, 271, text-figs. 1-3 (G. williamsoni leptosomus).
Hubbs, C. L. 1924 A, 177 ("Gasterosteus").
Jordan, D. S. 1908 A, 117.
1908 B, 811.
Jordan and Beal 1913 A, 256.
Miocene (Lahontan); Nevada.

Order LOPHOBRANCHIA Latreille.

Latreille, P. A. 1825 A, 116.
This name is usually spelled *Lophobranchii*.
Allis, E. P. 1909 A, 195.
Arldt, T. 1907 D, 663.
Bonaparte, C. L. 1831 A, 97, 119.
Boulenger, G. A. 1904 A, 174.
1904 D, 629.
Bridge, T. W. 1896 A, 578.
Bronn, H. G. 1848 A, 688.
Carus, V. 1875 A, 585.
Cope, E. D. 1871 T, 457.
1872 C, 335, 339.
1891 N, 25, 26.
Dean, Gudger, Henn 1923 A, 687.
Fitzinger, L. J. 1873 A, 48.
Gill, T. 1872 C, xxxix, 2.
1885 C, 285.
1896 D, 153 ("lophobranchs").
Goetsch, W. 1920 A, 11, 453 ("lophobranchier").
Goodrich, E. S. 1909 A, 414.
Gregory, W. K. 1907 D, 493.
Günther, A. C. 1870 A, 150.
1880 A, 678.
1881 A, 688, 694.
Hollard, H. 1850 A, 565 ("lophobranches").
Huot, A. 1902 A.
Jordan, D. S. 1904 A, 598.
1905 A, ii, 235.
1907 B, 450.
1923 A, 174.
Jordan and Gilbert 1882 A, 381.
Jungerson, H. F. E. 1910 A, 269.
1910 B, 503.
Kaup, F. 1853 A, 226.
Kerr, R. 1860 B, 821.
Klein, E. F. 1879 A, 69 ("lophobranchen").
Meek, A. 1916 A, 195.
Müller, J. 1845 A, 102, 130.
1846 C, 122, 131.
Owen, R. 1866 A, 12, 114, 368.
Parker, W. K. 1868 A, 32.
Pouchet, G. 1878 A, 49 ("lophobranches").
Regan, C. T. 1909 B, 78, 84.
1912 B, 845.
Ryder, J. 1882 A, 191 ("lophobranchiates").
Schlosser, M. 1917 A, 142 ("lophobranchier").
Stannius, H. 1854 A, 7, seq.
Stephan, P. 1900 A, 295, 321 ("lophobranches").
Zittel and Koken 1911 A, 141.
Zittel and Schlosser 1923 A, 134.

SYNGNATHOIDÆ, new form.

Gill, T. 1885 C, 285 (Syngnathi).
Regan, C. T. 1912 A, 845 (Syngnathoidei).

SYNGNATHIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 97, 119.
Arldt, T. 1907 D, 684.
1923 A, 521 ("syngnathiden").
Bonaparte, C. L. 1838 B, 130.
Boulenger, G. A. 1904 A, 174.
1904 D, 757.
1917 B, 330.
Bridge, T. W. 1896 A, 578.
Carus, V. 1875 A, 585 (Syngnathoidei).
Cope, E. D. 1871 T, 457.
1872 C, 339.
Dean, Gudger, Henn 1923 A, 703.
Fries, B. F. 1838 A, 238 (Syngnathi).
Gill, T. 1885 C, 285.
1896 D, 153, 157.
Goetsch, W. 1915 A, 438 ("syngnathiden").
Goodrich, E. S. 1909 A, 415.
Gregory, W. K. 1907 D, 493.
Günther, A. C. 1870 A, 153.
1880 A, 679.
1881 A, 694.
Hollard, H. 1850 A, 565 ("syngnathes").
Huot, A. 1902 A ("syngnathiniens").
Jordan, D. S. 1923 A, 174.
Jordan and Evermann 1898 A, 760.
Jordan and Gilbert 1882 A, 382.
Jungerson, H. F. E. 1910 A, 292, 346.
Kaup, F. 1853 A, 228.
Klein, E. F. 1884 A, 135, 150, 199, 201, 234, 244.
1885 A, 108, 109, 128, 157, 164, 197, 199, 217, 251.
1886 A, 205, 229, 268, 273, 285, 295.
Meek, A. 1916 A, 195.
Mivart, St. G. 1879 B, 540 ("sea-horses").
Norman, E. W. 1926 A.
Owen, R. 1866 A.
Rauther, M. 1913 A, 1016 ("syngnathiden").
Ryder, J. 1882 A, 191 ("sea-horses").
Schmalhausen, J. J. 1916 C, 212.
Siebenrock, F. A. 1901 A, 106.
Stannius, H. 1854 A (Syngnathi).
Woodward, A. S. 1901 A, 380.
Zittel and Koken 1911 A, 141 ("syngnathiden").
Zittel and Schlosser 1923 A, 134.

SYNGNATHUS Linn. Type *S. acus* Linn.

Linnæus, C. 1758 A, 336.
Allis, E. P. 1909 A, 195, 198.
Arldt, T. 1923 A, 521.
Baudelot, E. 1873 A, 94.
Buist, T. P. 1912 A, 613, pl. xiii.
Dean, Gudger, Henn 1923 A, 703.
Fries, B. F. 1838 A, 236.
1838 B, 251.
Goetsch, W. 1915 A, 441, pl. xviii; text-figs. 1.
1920 A, 11, 38, 454, pl. xx.
Goodrich, E. S. 1909 A, 414.
Günther, A. C. 1870 A, 153.

Huot, A. 1902 A, pls. xxi, xxvi.
Jordan, D. S. 1917 A, 16.
Jordan and Evermann 1898 A, 761 (Siphostoma).
1917 A, 16.
Jordan and C. Gilbert 1882 A, 383 (Siphostoma).
Jordan and J. Z. Gilbert 1919 A, 34.
Jungerson, H. F. E. 1910 A, 304, 353.
1910 B, 569.
Kasaneff, W. 1906 A, 854, figs. 1-6.
Kindred, J. E. 1921 A, 425, figs. 1-14.
1924 A, 421, pls. i-iii.
Kingsley, J. S. 1925 A, 92, fig. 97.
Klein, E. E. 1885 A, 108, 157, 197, 217, 252.
McMurrich, J. P. 1883 A, 623, pls. xlii, xliii.
Meek, A. 1916 A, 196.
Owen, R. 1866 A, 195.
Parker, W. K. 1868 A, 32.
Pouchet, G. 1878 A, 34, 40, 76, 144, figs. ("syngnathe").
Rauther, M. 1913 A, 1061, fig. 5.
Ryder, J. 1882 A, 194.
Siebenrock, F. 1901 A, 118.
Stannius, H. 1854 A, 75.
Swinnerton, H. H. 1902 A, 575.
Vogel, R. 1909 A, 534.
Woodward, A. S. 1901 A, 382.

Syngnathus avus Jordan and Gilbert.

Jordan and Gilbert 1919 A, 34, pl. xxviii, fig. 8.
Duncker, G. 1923 A, 239.
Jordan, D. S. 1921 A, 259.
1926 B, 223.
1927 A, 191.
Miocene (Monterey); California.

Order PERCOPSOMORPHI, new name.

Unless otherwise indicated the authors, as quoted, use for this family the name Salmopercæ. This is the plural of the genus name *Salmoperca*.

Boulenger, G. A. 1904 D, 620 (Part of Haplomi).
Frost, G. A. 1926 A, 470, pl. xx.
Goodrich, E. S. 1909 A, 425.
Jordan, D. S. 1923 A, 164 (Salmopercæ); 165 (Xenarchi).
Jordan and Evermann 1896 A, 782.
Regan, C. T. 1909 B, 79, 84.
1911 C, 294.
1912 B, 842, 846.
Jordan, D. S. 1905 A, 241.
1907 B, 456, 765.

ERISMATOPTERIDÆ.

Jordan, D. S. 1905 A, ii, 242, 296.
Jordan, D. S. 1907 B, 457.

ERISMATOPTERUS Cope. Type *E. rickseckeri* Cope.

Hay, O. P. 1902 A, 404.
Boulenger, G. A. 1902 E, 200.
Eastman, C. R. 1917 A, 294.
Jordan, D. S. 1903 A, 137.
1905 A, ii, 242.
1907 B, 457.

Erismatopterus endlichii Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T .D. A. 1908 C, 176.
Jordan, D. S. 1907 B, 457, fig. 362.
Merrill, G. P. 1907 A, 11.
Woodward, A. S. 1901 A, 416.
Eocene (Green River); Wyoming.

Erismatopterus levatus Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 176.
Hussakof, L. 1908 A, 74.
Jordan, D. S. 1905 A, ii, 242.
1907 B, 457.
Woodward, A. S. 1901 A, 416.
Eocene (Green River); Wyoming.

Erismatopterus rickseckeri Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 176.
Hussakof, L. 1908 A, 74.
Woodward, A. S. 1901 A, 416.
Eocene (Green River); Wyoming.

AMPHIPLAGA Cope. Type *A. brachyptera* Cope.

Hay, O. P. 1902 A, 403.
Boulenger, G. A. 1902 E, 200.
Eastman, C. R. 1917 A, 294.
Jordan, D. S. 1903 A, 137.
1905 A, ii, 243.
1907 B, 458.
Zittel and Koken 1911 A, 132.

Amphiplaga brachyptera Cope.

Hay, O. P. 1902 A, 403.
Cockerell, T. D. A. 1908 C, 176.
Merrill, G. P. 1907 A, 6.
Woodward, A. S. 1901 A, 416.
Eocene (Green River); Wyoming.

ASINEOPIDÆ Cope.

Cope, E. D. 1870 H, 380.
Hay, O. P. 1902 A, 403 (Aphrododeridæ, part).
Cockerell, T. D. A. 1914 A, 191.
Jordan, D. S. 1905 A, 243, 296, 317.
Jordan, D. S. 1907 B, 458, 532.
1923 A, 165.
Woodward, A. S. 1901 A, 416.
Zittel and Koken 1911 A, 132.

ASINEOPS Cope Type *A. squamifrons* Cope.

Hay, O. P. 1902 A, 404.
Boulenger, G. A. 1902 E, 200.
1904 D, 656.
Cockerell, T. D. A. 1914 A, 191.
Eastman, C. R. 1917 A, 294.
Haseman, J. D. 1912 A, 98.

Jordan, D. S. 1903 A, 137.
Zittel and Koken 1911 A, 132.

Asineops pauciradiatus Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 176.
1914 A, 191.
Merrill, G. P. 1907 A, 6.
Woodward, A. S. 1901 A, 417.
Eocene (Green River); Wyoming.

Asineops squamifrons Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 176.
1914 A, 191.
Hussakof, L. 1908 A, 63.
Jordan, D. S. 1905 A, 243, 217.
1907 B, 532.
Merrill, G. P. 1907 A, 7.
Woodward, A. S. 1901 A, 417.
Eocene (Green River); Wyoming.

APHREDODERIDÆ Günther.

Günther, A. C. 1859 A, 271.
Hay, O. P. 1902 A, 403.
Arldt, T. 1907 D, 280, 284.
1923 A, 678 (Aphredoderus).
Bonaparte, C. L. 1846, Cat. Met. Pesci Europei, 7 (Aphredodeiridæ).
Boulenger, G. A. 1902 E, 199.
Cockerell, T. D. A. 1906 A, 163.
1913 B, 152.
1916 A, 899 (Aphredoderus).
Dean, Gudger, Henn 1923 A, 375, 499, 647 (Aphredoderus).
Gill, T. 1875 B, 252.
Goodrich, E. S. 1909 A, 427.
Jordan, D. S. 1905 A, ii, 294, 557.
1907 B, 509.
1919 B, 178.
1923 A, 165.
Jordan and Gilbert 1882 A, 460.
Regan, C. T. 1911 C, 296.
1911 D, 320.
Schlosser, M. 1917 A, 144 ("aphredoderiden").
Starks, E. C. 1904 B, 603.
Wallace, A. R. 1876 A, ii, 425.
Woodward, A. S. 1901 A, 416.
Zittel and Koken 1911 A, 132 (Aphreidoderidæ).
Zittel and Schlosser 1923 A, 138.

TRICHOPHANINÆ Cockerell.

Cockerell, T. D. A. 1913 B, 152.
Cockerell, T. D. A. 1908 A, 573 (Trichophanidæ).

TRICHOPHANES Cope. Type *T. hians* Cope.

Hay, O. P. 1902 A, 404.
Boulenger, G. A. 1902 E, 200.
Cockerell, T. D. A. 1906 A, 163.
1908 A, 570.
Eastman, C. R. 1917 A, 294.
Jordan, D. S. 1903 A, 137.
Schlosser, M. 1917 A, 144.

Tricophanes copei Osborn, Scott, and Speir.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1906 A, 163.
1908 A, 571.
1908 C, 176.
Woodward, A. S. 1901 A, 416.
Miocene (Florissant); Colorado.

Trichophanes foliarum Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1906 A, 163.
1908 A, 571, figs. 1, 2.
1908 C, 176.
1913 B, 252.
Eastman, C. R. 1917 A, 294.
Jordan, D. S. 1910 B, 186.
Merrill, G. P. 1907 A, 20.
Woodward, A. S. 1901 A, 416.
Miocene (Florissant); Colorado.

Trichophanes hians Cope.

Hay, O. P. 1902 A, 404.
Merrill, G. P. 1907 A, 20.
Tertiary ("coal shales"); Nevada.

Order HETEROSOMATA Bonaparte.

Bonaparte, C. L. 1846, Cat. Met. Pesci Europ., 47.
Boulenger, G. A. 1902 B, 302 (Zeorhombi, part).
Cockerell, T. D. A. 1913 B, 171.
Cope, E. D. 1871 T, 456.
1872 C, 340.
1891 N, 25, 26.
Dean, Gudger, Henn 1923 A, 653.
Gill, T. 1861 A, 7.
1872 C, 2.
1885 C, 275.
Goode and Bean 1895 A, 426.
Gregory, W. K. 1907 D, 453.
Günther, A. C. 1880 A, 553 (Pleuronectoidei).
1881 A, 692 (Pleuronectoidei).
Jordan, D. S. 1905 A, ii, 247, 481.
1907 B.
1923 A, 166.
Jordan and Evermann 1896 A.
Jordan and Gilbert 1882 A, 813.
Klein, E. F. 1879 A, 103 (Pleuronectoidei).
Kner, R. 1861 A, 235 (Pleuronectides).
Mayhoff, H. 1914 A, 389.
Meek, A. 1916 A, 356.
Müller, J. 1846 C (Anacanthini, in part).
Regan, C. T. 1909 B, 80.
1910 C, 484, 491.
1912 B, 842, 850.
1913 B, 111.

HIPPOGLOSSIDÆ Jordan.

Jordan, D. S. 1923 A, 168.
1905 A, ii, 489 (Hippoglossinæ).
1925 B, 17.

Jordan and Evermann 1898 A, 2605 (Hippoglossinæ).
Kyle, H. M. 1921 A, 75 ("flat-fishes").

ISOMMA Jordan. Type *I. pristinum* Jordan.

Jordan, D. S. 1927 B, 94.

Isomma pristinum Jordan.

Jordan, D. S. 1927 B, 95.
Upper Miocene (Monterey); California.

HIPPOGLOSSUS Cuvier. Type *H. hippoglossus* (Linnæus).

Cuvier, G. 1817, Règne Anim., ed. 1, ii, 221.
Gill, T. 1885 C, 276.
Günther, A. C. 1862 A, 402.
Jordan, D. S. 1925 B, 17.
Jordan and Evermann 1898 A, 2611.
Jordan and Gilbert 1882 A, 818.

Kyle, H. M. 1921 A, 77, 89, pl. vi, figs. 35, 36.

Hippoglossus antiquus Jordan.

Jordan, D. S. 1924 B, 43, pl. G.
1925 B, 18.
Miocene (Monterey); California.

VORATOR Jordan. Type *Hippoglossus antiquus* (in part) Jordan.

Jordan, D. S. 1925 B, 17.

Vorator antiquus (Jordan).

Jordan, D. S. 1924 B, pl. G (Hippoglossus antiquus, in part).
1925 B, 18, pls. viii, ix.
Miocene (Monterey); California.

PLEURONECTIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 96, 117.
Abel, O. 1921 A, 159 ("pleuronektiden").
Allis, E. P. 1909 A, 195, 214.
Arldt, T. 1923 A, 692 ("pleuronectiden").
Bassoli, G. G. 1906 A, 46, pl. ii (otoliths).
Berrill, N. J. 1925 A, 217, figs. 1-15 (Pleuronectes, Solea).
Bonaparte, C. L. 1838 B, 131.
Boulenger, G. A. 1902 B, 295, 303.
1904 A, 183.
1904 D, 751.
1917 B, 329.
Bridge, T. W. 1896 A, 559.
Carus, V. 1875 A, 554 (Pleuronectoidei).
Cockerell, T. D. A. 1913 B.
Cope, E. D. 1871 T, 458.
1872 C, 340.
Creaser, C. W. 1926 A, 53.
Cunningham, J. T. 1905 A, 125, pls. vii-ix.
Cuvier, G. 1805 A ("pleuronectes").
Dahl, K. 1909 A, 760.
Dean, Gudger, Henn 1923 A, 696.
Dietz, P. A. 1917 A, 86.
1921 A, 433.
Fitzinger, L. J. 1873 A, 42 (Pleuronectæ).
Fulton, T. W. 1906 A, 50, 69, pls. i B, iii A.
Gill, T. 1865 D, 215 (Pleuronectoidæ).
1872 C, 2.
1885 C, 276.
1889 B, 593, 606.
Goette, A. 1901 A, 533 ("pleuronectiden").
Goode and Bean 1895 A, 426.
Goodrich, E. S. 1909 A, 469.
Gregory, W. K. 1907 D, 499.
Günther, A. C. 1862 A, 399.
1880 A, 553.
1881 A, 692.
Hasse, C. 1872 A ("pleuronecten").
Hasse and Schwarck 1870 A, 46 ("pleuronectiden").
Jordan, D. S. 1911 A, 432.
1923 A, 169.
Jordan and Evermann 1898 A, 2602.
Jordan and Gilbert 1882 A, 813.
Kingsley, J. S. 1925 A, 71, 93, 107, 108, 224, 225, 237, figs. 74, 98, 114, 235 (Pleuronectes).
Klein, E. F. 1868 A ("pleuronecten").
1868 B, 271 (Pleuronectæ).
1879 A, 123 (Pleuronecta).
1884 A, 131, 137, 145, 193, 224, 244, 246.
1885 A, 120, 142, 164, 182, 209, 239.
1886 A, 221, 256, 287.
Kner, R. 1861 A, 235 (Pleuronectes).
Köstlin, O. 1844 A ("plattfische").
Kyle, H. M. 1921 A, 75 ("flat-fishes").
Ledouble, A. F. 1906 A, 551 ("pleuronectidés").
Leunis and Ludwig 1883 A, 714.
Mayhoff, H. 1914 A, 389 ("plattfische").
Meek, A. 1916 A, 256, 411, 414.
M'Donnell, R. 1864 A, 173.
Meckel, J. F. 1825 A ("pleuronecten").
Norman, E. W. 1926 A, 425 (Pleuronectes).
Owen, R. 1845 B, 106 ("pleuronectoids").
1848 B, 90, fig. 16.
1860 E, 149.
1866 A.
Regan, C. T. 1910 C, 490, 493.
1912 B, 850.
Sauvage, H. E. 1872 A, 1118 ("pleuronectes").
Schiödte, J. C. 1868 A, 378.
Schlosser, M. 1917 A, 142 ("pleuronectiden").
Schubert, R. J. 1906 A, 670.
Shepherd, C. E. 1916 A, 178, 184.
Siebenrock, F. 1901 A, 107.
Stannius, H. 1849 A, 539 (Pleuronectes),
1854 A, 5, seq. (Pleuronectides).

Terra, P. 1911 A, 213.
Thilo, O. 1899 A, 175 ("schollen").
1901 A, 315 ("schollen").
1902 A, 305 ("schollen").
1902 B, 717 ("schollen").
1920 A, 119 ("schollen").
Thompson, W. 1865 A, 361.
Tomes, C. S. 1877 A, 45.
1878 A, 45, pl. iv (Pleuronectes).
Traquair, R. H. 1865 A, 263.
1865 B, 215.
Tretjakoff, D. 1925 A, 379, figs. 1-4 ("pleuronectiden").
Van Beneden, P. J. 1853 A, 340 ("pleuronectes").
Wagner, R. 1843 A ("schollen").
Wallace, A. R. 1876 A, ii, 440.
Webb, W. M. 1905 A, 60, figs. 7, 8 ("flat-fish").
Weber, E. H. 1821 A, 1062 (Pleuronectis).
Weiler, W. 1922 A, 74 (otoliths).
Williams, S. R. 1902 A, 1-57 ("flounders").
Wright, E. P. 1878 A, 287, figs. 1-3 ("flounders").
1878 B, 150 ("flounders").
Zittel and Koken 1911 A, 128.
Zittel and Schlosser 1923 A, 149.

EVESTHES Gilbert. Type *E. jordani* Gilbert.

Gilbert, J. Z. 1910 A, 407.
Jordan, D. S. 1925 B, 17.
Jordan and Gilbert 1920 A, 37.

Evesthes jordani Gilbert.

Gilbert, J. Z. 1910 A, 407, pl. xlii.
Jordan, D. S. 1911 A, 436.
1921 A, 263, pl. xxxiv.
Jordan and Gilbert 1919 A, 58, pl. xxv, xxvi.
1920 A, 37, pl. xxiv.
Miocene (Monterey); California.

Evesthes hooveri Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 38, pl. xxvi.
Jordan, D. S. 1921 A, 263, pls. xi, xxxv.
Miocene (Monterey); California.

ZORORHOMBUS Jordan. Type *Zororhombus veliger* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 39.
1921 A, 264.

Zororhombus veliger Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 39, pl. xxvii.
1921 A, 264.
1921 B, 462, figs. 3, 4.
1922 D, 271, fig. 1.
Miocene (Monterey); California.

Order PERCOMORPHI Cope.

Cope, E. D. 1871 T, 456.
Unless otherwise indicated the authors, as quoted, use for this group the name Acanthopterygii. The writers are not well agreed on the limits of the Order.
Hay, O. P. 1902 A, 400 (Percomorphi).
Abel, O. 1912 F, 441.
1919 A, 157.
Agassiz, L. 1835 I, 99 ("cténoidians").
1840 C, 105 ("cténoides").
1844 D, 139 ("cténoides").
1844 E, 332 ("cténoides").
1845 C, 323 ("cténoides").
Allis, E. P. 1905 A, 464.
1907 A, 569.
Arldt, T. 1907 D, 635 (Acanthopteri).
1923 A, 673 ("acanthopteren").
Bardeleben, K. 1907 A, 36 (Acanthopteri).
Bonaparte, C. L. 1833 B, 1197.
Boulenger, G. A. 1902 B, 298 ("acanthopterygians").
1902 C, 389.
1904 A, 177 (Acanthopterygii, Percomorphi).
1904 D, 650.
Bridge, T. W. 1896 A, 560.
Bronn, H. G. 1849 A, 589, 830 (Acanthopteri).
Carus, V. 1875 A, 516 (Acanthopteri).
Cockerell, T. D. A. 1913 B, 149 (Percomorphi); 143 (Acanthopteri).
Cope, E. D. 1891 N, 25, 26.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 694 (Perciformes).
Dietz, P. A. 1917 A, 81, 86 (Perciformes).
Dollo, L. 1909 B (137) ("acanthoptérygiens").
Eastman, C. R. 1905 A, 55.
1908 A, 64.
1911 A, 20, 45.
Fowler, H. W. 1911 A, 168 (Acanthopteri); 175 (Percomorphi).
Gill, T. 1885 C, 181 (Acanthopterygii).
1905 A, 659.
Goodrich, E. S. 1909 A, 424.
Gregory, W. K. 1907 D, 452 (Acanthopteroidei, Acanthopterygii); 453 (Percomorphi).
Hoernes, R. 1886 A, 532 (Anarthropteri).
Hubbs, C. L. 1919 B, 61.
Ihering, H. 1891 C, 24 ("acanthopterygier").
Jaeckel, O. 1911 A, 95.
Jordan, D. S. 1903 A, 171.
1905 A, ii, 258, 585 (Percomorphi).
1907 B, 473, 765 (Percomorphi).
1923 A, 177 (Percomorphi).
Jordan and Gilbert 1882 A, 397 (Acanthopteri).
Klaatsch, H. 1890 A, 175 ("acanthopterygier").
Klein, E. F. 1884 A, 135, 140, 156 (Acanthopterygia).
1886 A, 207, 236, 251, 274 ("acanthopterygien").
Kner, R. 1860 B, 814 (Acanthopteri).
Köstlin, O. 1844 A ("acanthopterygier").
Latreille, P. A. 1825 A, 128 (Acanthopterygia).
Leunis and Ludwig 1883 A, 658 (Acanthopteri).

Lönnberg, E. 1901 A (Acanthopterygia).
1902 A (Acanthopteri).
Lütken, C. 1868 C (Acanthopteri).
Meek, A. 1916 A, 284, 414.
Müller, J. 1845 A, 102, 130, 135 (Acanthopteri).
1846 C (Acanthopteri).
Owen, R. 1866 A, 112, 193 (Acanthopteri).
Parker and Haswell 1897 A, 205 (Acanthopteri).
Rauther, M. 1913 A, 1103.
Regan, C. T. 1909 A, 70 (Percomorphi).
1909 B, 80, 85 (Percomorphi).
1912 B, 830, 843, 850 (Percomorphi).
1913 B, 111, 113 (Percomorphi).
Richardson, J. 1836 A, 1.
Schlosser, M. 1917 A, 142 ("acanthopterygier").
Stannius, H. 1854 A (Acanthopteri).
Starks, E. C. 1908 A, 415.
Stephan, P. 1898 A, 358 ("acanthopterygiens").
1900 A, 292 ("acanthopterygiens").
Terra, P. 1911 A, 216 (Acanthopteri).
Wagner, R. 1843 A, 204.
Whitehouse, R. H. 1910 C, 141.
1910 H, 610.
Woodward, A. S. 1898 B, 121 (Percomorphi).
1901 A, xi, 384.
1906 C, 281.
Zittel and Koken 1911 A, 128.
Zittel and Schlosser 1923 A, 137.
Zittel and Woodward 1902 A, 104 (Acanthopteri).

Suborder Beryciformes Günther.

Günther, A. C. 1880 A, 419.
Dean, Gudger, Henn 1923 A, 590 (Berycomorphi).
Boulenger, G. A. 1902 C, 389.
Eastman, C. R. 1911 C, 363.
Frost, G. A. 1927 A, 440 (Berycomorphi).
Goodrich, E. S. 1909 A, 426.
Günther, A. C. 1881 A, 689.
Jordan, D. S. 1923 A, 172 (Berycoidei).
Leunis and Ludwig 1883 A, 674.
Regan, C. T. 1909 B, 80 (Berycomorphi).
1911 A, 1-9 (Berycomorphi).
1912 B, 842, 849 (Berycomorphi).
Woodward, A. S. 1901 A, 384.
Zittel and Schlosser 1923 A, 137.

BERYCOIDÆ, new form.

Hay, O. P. 1902 A, 402 (Berycoidea).
Allis, E. P. 1909 A, 201 (Berycoidea).
Arldt, T. 1923 A, 677 ("beryciden").
Boulenger, G. A. 1902 E, 198 (Berycoidea).
Cockerell, T. D. A. 1913 B, 148 (Berycoidea).
Fitzinger, L. J. 1873 A, 29 (Beryces).
Fowler, H. W. 1911 A, 172 (Berycoidei).
Gill, T. 1885 C, 181 (Berycoidea).
Gregory, W. K. 1907 D, 452 (Berycoidei).
Jordan, D. S. 1905 A, ii, 250, 559 (Berycoidei).
Jordan, D. S. 1907 B, 465, 765 (Berycoidei).
Klein, E. F. 1879 A, 89 (Berycidæ).
1884 A, 135, 139, 203, 245 (Berycidæ).
1885 A, 109, 133, 165, 224 (Berycidæ).
1886 A, 207, 237, 274 ("beryciden").
Regan, C. T. 1909 B, 80 (Berycoidei).
Schlosser, M. 1917 A, 140, 142 ("beryciden").
Starks, E. C. 1904 B, 601 ("berycoid fishes").
Woodward, A. S. 1898 C, 259 ("berycoids").
1906 C, 281 ("berycoids").

HOPLOPTERYGIDÆ Cockerell.

Cockerell, T. D. A. 1919 A, 186.
Jordan, D. S. 1923 A, 172.
Regan, C. T. 1911 A, 4 (Berycidæ).

Hoplopteryx Agassiz. Type *H. antiquus* Agassiz.

Agassiz, L. 1843 B (1838), iv, 4.
Hay, O. P. 1902 A, 402 (Beryx).
Cockerell, T. D. A. 1919 A, 186.
Goodrich, E. S. 1909 A, 427.
Regan, C. T. 1911 A, 4.
Woodward, A. S. 1901 A, 396.
Zittel and Koken 1911 A, 131, fig. 242.
Zittel and Schlosser 1923 A, 138, fig. 234.

Hoplopteryx? insculptus (Cope).

Hay, O. P. 1902 A, 402 (Beryx).
Cockerell, T. D. A. 1919 A, 187 (Hoplopteryx?).
Fowler, H. W. 1911 A, 173, fig. 106 (Beryx).
Hussakof, L. 1908 A, 63, fig. 31 (Beryx).
Jordan, D. S. 1905 A, ii, 251 (Beryx).
Woodward, A. S. 1901 A, 386 (Beryx).
Upper Cretaceous (Navesink, Red Bank); New Jersey.

TRICHIUROIDÆ, new form.

Günther, A. C. 1880 A, 433 (Trichiuriformes).
1881 A, 689 (Trichiuriformes).
Regan, C. T. 1909 A, 70 (Trichiuriformes, as "division").
Regan, C. T. 1909 B, 86 (Trichiuriformes, as "division").
1913 B, 111 (Trichiuroidea, as subord.).

GEMPYLIDÆ Gill.

Gill, T. 1893 B, 97.
1862 C, 125, 126 (Gempylinæ).
1862 D, 329 (Gempylinæ).
1893 A, 133 (Gempylinæ).
Günther, A. 1860 A, 342 (Trichiuridæ, in part).
Jordan, D. S. 1923 A, 180.
Jordan and Evermann 1898 A, 877.
Lütken, C. F. 1881 A, 7.
Regan, C. T. 1909 A, 70.
1909 B, 86.

THYRSITES Cuvier. Type *Scomber atun* Euphrasen.

Cuvier, G. 1829, Règne Animal, ed. 2, vol. ii, 200.
Arldt, T. 1923 A, 691.
Frost, G. A. 1928 B, 328, pl. xii.
Jordan and Evermann 1898 A, 878.
Jordan and Gilbert 1919 A, 41, 42.
Lütken, C. F. 1881 A, 7.
Woodward, A. S. 1901 A, 481.

Thyrsites kriegeri Jordan and Gilbert.

Jordan and Gilbert 1919 A, 41, pl. xvii, fig. 2.
Miocene (Monterey); California.

TRICHIURIDÆ Adams, Bakie, Barron.

Adams, Bakie, Barron 1854 A, 98.
Hay, O. P. 1902 A, 403.
Abel, O. 1922 F, 81.
Arldt, T. 1907 D, 686.
1923 A, 690 ("trichiuriden").
Boulenger, G. A. 1904 A, 182.
1904 D, 679.
Carus, V. 1875 A, 531 (Trichiuroidei).
Dean, Gudger, Henn 1923 A, 590, 593, 652.
Gill, T. 1885 C, 206.
Goodrich, E. S. 1909 A, 466.
Günther, A. C. 1860 A, 342.
Hoernes, R. 1886 A, 535.
Jordan, D. S. 1905 A, ii, 267, 596.
1923 A, 180.
Jordan and Gilbert 1882 A, 421.
Klein, E. F. 1885 A, 229.
Meek, A. 1916 A, 331.
Priem, F. 1908 B, 137 ("trichiurides").
Regan, C. T. 1909 A, 71.
Schlosser, M. 1917 A, 143, 148 ("trichiuriden").
Starks, E. C. 1911 B, 19.
Zittel and Koken 1911 A, 136.
Zittel and Schlosser 1923 A, 147.

TRICHIURUS Linn. Type *T. lepturus* Linn.

Hay, O. P. 1902 A, 403.
Arldt, T. 1923 A, 690.
Dean, Gudger, Henn 1923 A, 705.
Duméril, A. 1856 A, 227 ("trichiure").
Frost, G. A. 1928 B, 328, pl. xii.
Giebel, C. G. 1855 A, 104.
Jordan and Evermann 1917 A, 12.
Jordan and Gilbert 1882 A, 422.
Klein, E. F. 1884 A, 135, 185, 212, pl. ii.
1885 A, 202, 229.
1886 A, 243, 279.
Leunis and Ludwig 1883 A, 679.
Lütken, C. F. 1881 A, 7.
Starks, E. C. 1911 B, 25.

Trichiurus lepturus Linn.

Hay, O. P. 1902 A, 403.
1923 A, 363, 366.
Hussakof, L. 1908 A, 102.
Recent West Indies to Virginia: Quaternary; South Carolina.

Suborder SCOMBRIFORMES Günther.

Günther, A. C. 1880 A, 438.
Arldt, T. 1923 A, 689 ("scombriformen").
Boulenger, G. A. 1902 B, 301.
1904 A, 177, 181.
1904 D, 675.
Cunningham, J. T. 1912 A, 247.
Dean, Gudger, Henn 1923 A, 700.
Dietz, P. A. 1914 A, 124.
Eastman, C. R. 1911 C, 364.
Goetsch, W. 1920 A, 494.
Goodrich, E. S. 1909 A, 462.
Gregory, W. K. 1907 D, 454.
Jordan, D. S. 1923 A, 179.
Regan, C. T. 1909 A, 66, 70 (Scombroidei).
1909 B, 81 (Scombroidei).
1912 B, 850 (Scombroidei).
1913 B, 111 (Scombroidea).
Woodward, A. S. 1901 A, 418.
Zittel and Schlosser 1923 A, 145.

SCOMBROIDÆ, new form.

Unless otherwise indicated the authors, as quoted, use for this group the name Scombroidea.
Hay, O. P. 1902 A, 402.
Cockerell, T. D. A. 1913 B, 149.
Frost, G. A. 1928 A, 329.
Gill, T. 1872 C, 8.
1873 F, 9.
1885 C, 182.
Hoernes, R. 1886 A, 535 (Scombroidei).
Jordan, D. S. 1905 A, ii, 258, 591.
1907 B, 473, 765.
Lönnberg, E. 1902 A (Scomberoidei).
Owen, R. 1845 B, 121 ("scomberoids").
Rauther, M. 1913 A, 1103 (Scombriformes).
Regan, C. T. 1909 A, 71 (Scombriformes); 72 (Xiphiformes).
Schlesinger, G. 1909 A (152), (Scombriformes).
Starks, E. C. 1909 A, 574 (Scombroidei).
1910 A, 77 ("scombroids").
1911 B, 1 ("scombroid fishes").

CYBIIDÆ Jordan.

Jordan, D. S. 1925 B, 19.

THYRSION Jordan. Type *T. velox* Jordan.

Jordan and Gilbert 1920 A, 7, 17, 45.
Jordan, D. S. 1925 B, 21.

Thyrsion velox Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert 1920 A, 7, 17, pl. viii (not pl. ix = Diradias fenestralis).

Jordan, D. S. 1925 B, 21, pl. x.
Miocene (Monterey); California.

THYRSOCLES Jordan and Gilbert. Type *T. kriegeri* Jordan.

Jordan and Gilbert 1920 A, 7, 19, 45.
Jordan, D. S. 1925 B, 19.

Thyrsocles kriegeri Jordan and Gilbert.

Jordan and Gilbert 1920 A, 7, 20, 45, pl. xii (not pl. xi = Escharion townleyi).

Jordan, D. S. 1921 A, 273, pl. xxxvi, fig. *a*.
1925 B, 19; 20 (Thyrsocles escharion a syn.?).
1927 B, 90.
Miocene (Monterey); California.

ZAPHLEGES Jordan. Type *Zaphleges longurio* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 23, 24.
1921 A, 271.

Zaphleges longurio Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 24, pl. xiii.
1921 A, 271, pl. xxxviii, fig. *a*.

Jordan, D. S. 1925 B, 22, pl. xi.
1927 B, 90.
Miocene (Monterey); California.

Zaphleges vigilax Jordan.

Jordan, D. S. 1927 B, 90.
Upper Miocene (Lompoc); California.

ESCHARION Jordan. Type *Thyrocles kriegeri* Jordan, not of Jordan and Gilbert.

Jordan, D. S. 1925 B, 24.

Escharion townleyi Jordan.

Jordan, D. S. 1925 B, 25.

Jordan, D. S., in Jordan and Gilbert, J. Z. 1920 A, 20, pl. xi (Thyrocles kriegeri; not of Jordan and Gilbert).
Miocene (Monterey); California.

TURIO Jordan and Gilbert. Type *Turio wilburi* Jordan and Gilbert.

Jordan and Gilbert 1920 A, 13, 15.
Jordan, D. S. 1921 A, 223.

Turio culveri Jordan.

Jordan, D. S. 1925 B, 23, pl. 10.
Miocene (Monterey); California.

Turio wilburi Jordan and Gilbert.

Jordan and Gilbert 1920 A, 15, pls. vi, vii.
Jordan, D. S. 1921 A, 273, pl. xxxvii.
1925 B, 23.
Miocene (Monterey); California.

STARRIAS Jordan. Type *S. ischyrus* Jordan.

Jordan, D. S. 1925 B, 25.

Starrias ischyrus Jordan.

Jordan, D. S. 1925 B, 25, pl. xii.
Miocene (Monterey); California.

XESTIAS Jordan. Type *X. iratus* Jordan.

Jordan, D. S. 1921 A, 270.

Xestias iratus Jordan.

Jordan, D. S. 1921 A, 270, pl. iv, fig. *a*.
1925 B, 23.
Miocene (Monterey); California.

OCYSTIAS Jordan. Type *Ocystias sagitta* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert 1920 A, 14, 18.

Ocystias sagitta Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert 1920 A, 18, pl. x.

Jordan, D. S. 1921 A, 273, pl. xxxviii, fig. *a*.
1922 D, 272, fig. 3.
1925 B, 22.
1927 B, 91.
Miocene (Monterey); California.

Ozymandias Jordan. Type *O. gilberti* Jordan.

Jordan, D. S. 1919, in Jordan and Gilbert 1919 A, 43.

The position of this genus is obscure. It may belong to the Scombridæ.

Ozymandias gilberti Jordan.

Jordan, D. S. 1919, in Jordan and Gilbert 1919 A, 43 (Not O. gilberti of Jordan and Gilbert, 1920 A, 36).
1907 A, 134, pl. xi (Luvanus sp.).
1921 A, 275, pl. xiii.
Miocene; California.

SCOMBRIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 91, 107.
Abel, O. 1906 C, 84.
Agassiz, L. 1832 A, 142 ("scomberoiden").
Allis, E. P. 1903 B, 45, pls. i-xii (Scomber).
1909 A, 214 (Scomber).
1919 E, 366 (Scomber).
1922 B, 194, 201, 208 (Scomber).
1923 B, 124 (Scomber).
Arldt, T. 1923 A, 690 ("scombriden").
Baudelot, E. 1873 A, 101 ("scombéroides").
Bonaparte, C. L. 1833 B, 1198.
1838 B, 133.
Boulenger, G. A. 1904 D, 678, 755.
Bridge, T. W. 1896 A, 567.
Carus, V. 1875 A, 533 (Scomberoidei).
Cockerell, T. D. A. 1910 E, 47 ("scombrids").
1913 B, 149.
Cuvier, G. 1805 A ("scombres").
Dean, Gudger, Henn 1923 A, 590, 647, 652.
Dewitz, J. 1904 A, 408 (Scomber).
Dietz, P. A. 1914 A, 124.
Fryd, C. 1901 A, 21 (Scomberidæ).
Fulton, T. W. 1906 A, 57, pl. iii B.
Gaupp, E. 1905 D, 913 (Scomber).
Gill, T. 1862 C, 124 (Scombroidæ).
1862 D, 328-329 ("scombrids").
1885 C, 191.
Goetsch, W. 1920 A, 495.
Goodrich, E. S. 1909 A, 465.
Günther, A. C. 1881 A, 690.
Heckel, J. J. 1856 A, 261 (Scomberoidei).
Jordan, D. S. 1905 A, ii, 258, 272, 470.
1907 A, 133.
1923 A, 179.
1925 B, 26.
Jordan and Evermann 1896 A, 863.
Jordan and Gilbert 1882 A, 422.
Jordan and Gilbert, J. Z. 1920 A, 13.
Kingsley, J. S. 1925 A, 97, 112, fig. 117 (Scomber).
Klein, E. F. 1879 A, 92.
1884 A, 135, 186, 213.
1885 A, 111, 136, 169, 199, 200, 202, 229.
1886 A, 211, 243, 280.
Kner, R. 1861 A, 258 ("scombriden"); 773 (Scomberoidei).
Köstlin, O. 1844 A ("scomberoiden").
Leunis and Ludwig 1883 A, 682.
M'Donnell, R. 1864 A, 172.
Masterman, A. T. 1894 A, 272, pls. xi, xii ("tunny").
Meckel, J. F. 1825 A (Scomber).
Meek, A. 1916 A, 319.
Norman, E. W. 1926 A, 403 (Scomber).
Owen, R. 1845 B, 121 ("scomberoids,").
1866 A (Scomberidæ).
Priem, F. 1908 B, 99 ("scombridés").
Regan, C. T. 1903 C, 372.
1909 A, 72.
Schlosser, M. 1917 A, 142 ("scombriden").
Shepherd, C. E. 1910 B, 297.
1912 A, 455.
Siebenrock, F. 1901 A, 107.
Stannius, H. 1849 A, 540 ("scombroiden").
1854 A, 4, seq. (Scomberoidei).
Starks, E. C. 1909 A, 573.
1910 A, 77, 79 (Scombrinæ).
1911 B, 11, 21, 27.
1916 A, 27.
Stephan, P. 1900 A, 286 (Scomber).
Storms, R. 1892 A, 2 ("scombridés").
Terra, P. 1911 A, 216.
Wallace, A. R. 1876 A, ii, 429.
Weiler, W. 1922 A, 77 (otoliths).
Whitehouse, R. H. 1918 A, 138 (Scomber).
Woodward, A. S. 1901 A, 451.
Zittel and Koken 1911 A, 139.
Zittel and Schlosser 1923 A, 146.

Auxides Jordan. Type *Thynnus propterygius* Agassiz.

Jordan, D. S. 1919 A, 10, 43.
Hubbs, C. L. 1924 A, 178.
Jordan and Gilbert 1920 A, 13.

Auxides bruntoni Jordan.

Jordan, D. S. 1921 A, 270, pl, ix, fig. *a*.
Miocene (Monterey); California.

Auxides dasson Jordan.

Jordan, D. S. 1921 A, 269, pl. iii, fig. *b*; pl. xxxvi, fig. *a*.
Miocene (Monterey); California.

Auxides sanctæ-monicæ Jordan.

Jordan, D. S. 1919 A, 5, 10, pl. v, fig. 2.
1921 A, 268.
Miocene? (Soledad); California.

Sphyrænodus Agassiz. Type *S. priscus* Agassiz.

Hay, O. P. 1902 A, 399 (Dictyodus).
Bronn, H. G. 1848 B, 1171.
Fowler, H. W. 1911 A, 170 (Dictyodus).
Giebel, C. G. 1855 A, 104.
Leriche, M. 1905 A, 152.
1906 C, 422.
1910 D, 319, fig. 121.
Priem, F. 1908 B, 91.

Stephan, P. 1900 A, 409.
Toula, F. 1905 A, 64.
Woodward, A. S. 1901 A, 473.

Sphyrænodus silovianus (Cope).

Hay, O. P. 1902 A, 399 (Dictyodus).
Eastman, C. R. 1904 H, 92.
Fowler, H. W. 1911 A, 170, fig. 104 (Dictyodus).
Hussakof, L. 1908 A, 71, fig. 37 (Dictyodus).
Woodward, A. S. 1901 A, 368, 616.
Miocene (Kirkwood); New Jersey.

Sphyrænodus speciosus (Leidy).

Hay, O. P. 1902 A, 399 (Dictyodus).
Eastman, C. R. 1904 H, 92, pl. xxxii, fig. 16 (Sphyræna).
Fowler, H. W. 1911 A, 171, fig. 105 (Dictyodus).
Woodward, A. S. 1901 A, 616 (Sphyræna).
Miocene (Calvert); Maryland: (Kirkwood); New Jersey.

XIPHIOIDÆ, new form.

Günther, A. C. 1880 A, 511 (Xiphiiformes).
1881 A, 689 (Xiphiiformes).
Jordan, D. S. 1923 A, 180 (Xiphiiformes).
Regan, C. T. 1909 A, 72 (Xiphiiformes).

XIPHIIDÆ Richardson.

Richardson, J. 1846 A, 276.
Hay, O. P. 1902 A, 402.
Agassiz, L. 1844 D, 142 ("xiphioides").
Allis, E. P. 1909 A, 201, 202.
Arldt, T. 1907 D, 281.
1923 A, 691 ("xiphiiden").
Boulenger, G. A. 1904 A, 182.
1904 D, 681.
Bronn, H. G. 1849 A, 780, seq. (Xiphioidei).
Carus, V. 1875 A, 533 (Xiphioidei).
Carter, J. T. 1919 A, 321, pl. i (Xiphias).
Dean, Gudger, Henn 1923 A, 652, 653.
Gill, T. 1885 C, 203.
Goodrich, E. S. 1909 A, 468.
Goode, G. B. 1882 A, 415.
Jordan, D. S. 1905 A, ii, 269.
1907 B, 484.
1923 A, 181.
Jordan and Evermann 1926 A, 70.
Jordan and Gilbert 1882 A, 419.
Klein, E. F. 1884 A, 135, 139, 186 (Xiphidæ).
1885 A, 138, 172, 231 (Xiphidæ).
1886 A, 212, 246, 274, 281 (Xiphidæ).
Leriche, M. 1910 D, 332.
Leunis and Ludwig 1883 A, 678.
Meek, A. 1916 A, 332.
Priem, F. 1908 B, 99 ("xiphiidés").
1912 A, 233 ("xiphiidés").
Regan, C. T. 1903 C, 372.
1909 A, 74.
Schlosser, M. 1917 A, 142, 144, 148 ("xiphiiden").
Shepherd, C. E. 1912 A, 457.
Stromer, E. 1917 A, 22.
Wagner, R. 1843 A (Xiphias).
Wallace, A. A. R. 1876 A, ii, 430.
Woodward, A. S. 1901 A, 490.
Zittel and Koken 1911 A, 140.
Zittel and Schlosser 1923 A, 148.

Cylindracanthus Leidy. Type *C. ornatus* Leidy.

Leidy, J. 1856 E, 12.
Hay, O. P. 1902 A, 331 (Cœlorhynchus).
Arldt, T. 1923 A, 700 (Cœlorhynchus).
Bronn, H. G. 1849 A, 675 (Cœlorhynchus).
Fowler, H. W. 1911 A, 141.
Hussakof, L. 1908 A, 44.
Jordan, D. S. 1923 A, 107.
Leidy, J. 1856 A, 422.
Leriche, M. 1905 A, 159 (Glyptorhynchus).
1906 B, 344 (Glyptorhynchus).
1906 C, 254, pl. xiv (Glyptorhynchus).
1909 A, 381.
1910 A, 471.
1910 D, 337.
Newton, E. T. 1891 A, 101 (Cœlorhynchus).
Priem, F. 1903 A, 404 (Cœlorhynchus).
1908 B, 100, 112 (Cœlorhynchus, Glyptorhynchus).
1911 A, 44.
1911 C, 25.
1912 A, 221, fig. 3.
Storms, R. 1891 A, 157 (Cœlorhynchus).
Stromer, E. 1903 A, 29 (Cœlorhynchus).
Williamson, W. C. 1851 A, 667, 697 (Cœlorhynchus).
Woodward, A. S. 1912 A (1911), 192, pl. xli (Cœlorhynchus).
1917 E, lxxviii (Cœlorhynchus).
Zittel and Schlosser 1923 A, 149, fig. 256 (Cœlorhynchus).

Cylindracanthus acus (Cope).

Hay, O. P. 1902 A, 331 (Cœlorhynchus).
Fowler, H. W. 1911 A, 142, fig. 88.
Hussakof, L. 1908 A, 44, fig. 18.
Eocene (Shark River); New Jersey.

Cylindracanthus ornatus Leidy.

Hay, O. P. 1902 A, 331 (Cœlorhynchus).
Cope, E. D. 1869 M, vi, pl. x, fig. 7 (Cœlorhynchus).
Fowler, H. W. 1911 A, 141, fig. 87.
Upper Cretaceous (Manasquan?); New Jersey, Virginia: Eocene (Shark River); New Jersey.

Cylindracanthus sp. indet.

Tuomey, M. 1848 A, 156, 157, 166, 180 (Cœlorhynchus).

Xiphias Linnæus. Type *X. gladius* Linnæus.

Allis, E. P. 1909 A, 202.
Arldt, T. 1923 A, 691.
Cuvier, G. 1815 A, 116.
Dean, Gudger, Henn 1923 A, 707.
Dietz, P. A. 1914 A, 108, 126, figs. 14, 15.
Duméril, A. 1856 A, 225, 375.
Eastman, C. R. 1901 B, 111.
1904 H, 93.
1917 A, 298.
Giebel, C. G. 1855 A, 104.
Jordan, D. S. 1905 A, ii, 269, 598.
Jordan and Evermann 1926 A, 71.
Jordan and Gilbert 1882 A, 419.
Leriche, M. 1909 A, 381.
Leriche, M. 1910 D, 333.
Lütken, C. F. 1881 A, 5.
Nopcsa, F. 1926 A, 637, fig. 2.
Owen, R. 1848 B, 46, 52, 57, pl. i, fig. 5.
1866 A, 38, 107, 118, 179.
Regan, C. T. 1924 B, 224, fig. 1.
Shepherd, C. E. 1912 A, 458.
Stannius, H. 1854 A, 4, 75.
Woodward, A. S. 1901 A, 490.
Zittel and Schlosser 1923 A, 148.

Xiphias sp. indet.

Eastman, C. R. 1917 A, 298, pl. xvi, fig. 3.
Phosphate beds; South Carolina.

ISTIOPHORIDÆ Jordan and Evermann.

Jordan and Evermann 1896 A, 890.
Hay, O. P. 1902 A, 402 (Istiophorinæ).
Abel, O. 1912 F, 586, fig. 455 (Histiophorus).
Arldt, T. 1923 A, 691 ("histiophoriden").
Boulenger, G. A. 1904 A, 182 (Histiophoridæ).
1904 D, 679 (Histiophoridæ).
Dean, Gudger, Henn 1923 A, 551, 652 (Histiophoridæ).
Fowler, H. W. 1911 A, 176.
Gill, T. 1885 C, 203 (Histiophoridæ).
Goodrich, E. S. 1909 A, 467 (Histiophoridæ).
Jordan, D. S. 1905 A, ii, 268 (Istiophoridæ).
1907 B, 483.
1923 A, 181.
Jordan and Evermann 1926 A, 27.
Meek, A. 1916 A, 332 (Histiophoridæ).
Regan, C. T. 1909 A, 74 (Histiophoridæ).
Steinmann, G. 1922 A, 75 (Histiophoridæ).
Zittel and Schlosser 1923 A, 148 (Histiophoridæ).

Istiophorus Lacepède. Type *Scomber gladius* Broussonet.

Hay, O. P. 1902 A, 402.
Abel, O. 1912 F, 430, fig. 308 (Histiophorus).
Arldt, T. 1923 A, 691 (Histiophorus).
Carter, J. T. 1919 A, 321, pl. ii (Histiophorus).
Cuvier, G. 1815 A, 117 ("istiophore").
Dean, Gudger, Henn 1923 A, 649, 652 (Histiophorus).
Duméril, A. 1856 A, 380 ("histiophore").
Fowler, H. W. 1911 A, 177.
Giebel, C. G. 1855 A, 104 (Histiophorus).
Jordan, D. S. 1905 A, ii, 269.
1907 B, 484.
Jordan and Evermann 1926 A, 35.
Jordan and Gilbert 1882 A, 421 (Histiophorus).
Klein, E. F. 1884 A, 135, 139, 186, 215 (Histiophorus).
1885 A, 112, 138, 172, 198, 204, 231 (Histiophorus).
1886 A, 207, 212, 246, 281, fig. 43 (Histiophorus).
Köstlin, O. 1844 A.
Leriche, M. 1906 C, 251 (Histiophorus).
1909 A, 381 (Histiophorus).
Lütken, C. F. 1881 A, 5 (Histiophorus).
Owen, R. 1845 B, 121 (Histiophorus).
1866 A, 114 (Histiophorus).
Regan, C. T. 1909 A, 73, fig. (Histiophorus).
Schlesinger, G. 1909 A (152), (Histiophorus).
Woodward, A. S. 1901 A, 495 (Histiophorus).

Istiophorus antiquus (Leidy).

Hay, O. P. 1902 A, 402.
Berry, E. W. 1917 C, 462.
Fowler, H. W. 1911 A, 177.
Woodward, A. S. 1901 A, 495 (Histiophorus).
Upper Cretaceous; New Jersey.

Istiophorus calvertensis Berry.

Berry, E. W. 1927 C, 461, figs. 1, 2.
Miocene (Calvert); Virginia.

Istiophorus homalorhamphus Cope.

Hay, O. P. 1902 A, 402.
Berry, E. W. 1917 C, 463.
Fowler, H. W. 1911 A, 178, fig. 107.
Kümmel, H. B. 1911 A, 180.
Woodward, A. S. 1901 A, 497 (Histiophorus).
Upper Cretaceous (Manasquan); New Jersey.

Istiophorus parvulus Marsh.

Hay, O. P. 1902 A, 402.
Berry, E. W. 1917 C, 463.
Fowler, H. W. 1911 A, 180.
Kümmel, H. B. 1911 A, 180.
Woodward, A. S. 1901 A, 495 (Histiophorus).
Cretaceous (Manasquan); New Jersey.

Istiophorus robustus (Leidy).

Hay, O. P. 1902 A, 402.
Berry, E. B. 1917 C, 462 (Xiphias).
Eastman, C. R. 1901 B, 111 (Xiphias).
Hay, O. P. 1923 A, 363.
Hussakof, L. 1908 A, 78, fig. 40.
Woodward, A. S. 1901 A, 497 (Histiophorus).
Quaternary? or Miocene (Ashley River marls); South Carolina.

Istiophorus rotundus A. S. Woodward.

Woodward, A. S. 1901 A, 495, fig. 18 (Histiophorus).
Tertiary (Phosphate beds); South Carolina.

Istiophorus sp. indet.

Wyman, J. 1854 A, 260. Tertiary; Virginia.

EMBALORHYNCHUS Marsh. Type *E. kinnei* Marsh.

Hay, O. P. 1902 A, 403.
Fowler, H. W. 1911 A, 180.
Jordan, D. S. 1919 B, 359 (E. kinneyi).

Embalorhynchus kinnei Marsh.

Hay, O. P. 1902 A, 403.
Fowler, H. W. 1911 A, 180.
Jordan, D. S. 1919 D, 359 (E. kinneyi).
Kümmel, H. B. 1911 A, 181.
Woodward, A. S. 1901 A, 497.
Upper Cretaceous (Manasquan); New Jersey.

Suborder PERCIFORMES Günther.

Günther, A. C. 1880 A, 374.
Arldt, T. 1923 A, 677 ("perciformen").
Boulenger, G. A. 1895 C, 1.
Cunningham, J. T. 1912 A, 247.
Eastman, C. R. 1911 C, 374.
Frost, G. A. 1927 A, 298.
Günther, A. C. 1881 A, 688.
Rauther, M. 1913 A, 1103.
Regan, C. T. 1909 B, 81, 85 (Percoidei).
1912 B, 850 (Percoidei).
1913 B, 112 (Percoidea).
Whitehouse, R. H. 1910 B, 611.
Woodward, A. S. 1901 A, 494.
Zittel and Schlosser 1923 A, 138.

PERCOIDÆ, new form.

Hay, O. P. 1902 A, 403 (Percoidea); 405 (Sciænoidea).
Bronn, H. G. 1849 A, 780, seq. (Percoidei, Sciænoidei).
Cockerell, T. D. A. 1910 E, 47 ("percoids").
1913 B, 150 (Percoidea).
Gill, T. 1872 C, 10 (Percoidea).
1885 C, 213 (Percoidea).
Gregory, W. K. 1907 D, 453 (Percoidea).
Hoernes, R. 1886 A, 537 (Sciænoidei).
Jordan, D. S. 1905 A, ii, 293, 585 (Percoidea).
1907 B, 508, 766 (Percoidea).
Lönnberg, E. 1902 A (Percoidea, Sciænoidea).
Regan, C. T. 1909 B, 81, 85 (Percoidei).
1910 C, 490 (Percoidea).
1912 B, 850 (Percoidei).
1913 B, 112 (Percoidea).
Stannius, H. 1854 A (Percoidei).
Starks, E. C. 1909 A, 574 (Percoidea).
The terms employed by the authors, as cited above, are by no means synonymous.

CENTRARCHIDÆ Gill.

Gill, T. 1872 C, 10.
Arldt, T. 1923 A, 678 ("centrarchiden").
Boulenger, G. A. 1895 C, 2.
1904 A, 179.
1904 D, 657.
Cockerell, T. D. A. 1913 B, 150.
1914 A, 191.
1919 A, 188.
Creaser, C. W. 1926 A, 4.
Dean, Gudger, Henn 1923 A, 673.
Gill, T. 1864 A, 92 ("centrarchoids").
Gill, T. 1885 C, 230.
Goodrich, E. S. 1909 A, 443.
Jordan, D. S. 1905 A, ii, 297, 562.
1907 B, 512.
1923 A, 189.
Jordan and Evermann 1896 A, 984.
Jordan and Gilbert 1882 A, 462.
Meek, A. 1916 A, 285.
Regan, C. T. 1913 B, 115.
1916 B, 547.
Storms, R. 1896 A, 212.

MICROPTERUS Lacepède. Type *M. dolomieu* Lacepède.

Lacepède, B. G. E. 1803, Hist. Nat. Poiss., iv, 325.
Cockerell, T. D. A. 1913 B, 144, 150, 151.
Dean, Gudger, Henn 1923 A, 689.
Frost, G. A. 1927 A, 301, pl. v.
Jordan, D. S. 1905 A, ii, 301, figs. 238, 239.
1907 B, 134, 516, figs. 88, 407, 408.
Jordan and Evermann 1896 A, 1010.
1917 A, 63.
Jordan and Gilbert 1882 A, 484.
Shufeldt, R. W. 1884 B, 532, 749, fig.
1901 E, 311, pl. xliv; text-figs. 1-8.

Micropterus sp. indet.

Matthew, W. D. 1924 C, 68 (This genus?). Upper Miocene (Lower Snake Creek); Nebraska.

LEPOMIS Rafinesque. Type *Labrus auritus* Linnæus.

Rafinesque, C. S. 1819, Jour. Physique, 1819, 420.
Barney and Anson 1923 A, 1-16, 7 figs.
Cockerell, T. D. A. 1913 B, 150.
Dean, Gudger, Henn 1923 A, 687.
Hubbs, C. L. 1922 A, 361, figs. 2, 3, 6.
Jordan, D. S. 1905, I, 4, fig. 2; II, 301, fig. 236.
Jordan and Evermann 1896 A, 999.
Jordan and Gilbert 1882 A, 472.

Lepomis sp. indet.

Baker, F. C. 1920 A, 462. Pleistocene (Wisconsin); Illinois.
Hay, O. P. 1923 A, 336. Pleistocene (Wisconsin); Illinois.

CENTRARCHITES Cockerell. Type *C. coloradensis* Cockerell.

Cockerell, T. D. A. 1919 A, 188.

Centrarchites coloradensis Cockerell.

Cockerell, T. D. A. 1919 A, 188, pl. xxxvi, fig. 12.
Eocene (Coalmont); Colorado.

PRISCACARIDÆ Jordan.

Jordan, D. S. 1923 A, 218.
Hay, O. P. 1902 A, 401 (Pomacentridæ).
Haseman, J. D. 1912 A, 97 (Cichlidæ).

PRISCACARA Cope. Type *P. serrata* Cope.

Hay, O. P. 1902 A, 401.
Arldt, T. 1923 A, 687.
Cockerell, T. D. A. 1908 C, 178.
1913 B, 166.
1915 A, 31.
1923 B, 2.
Eastman, C. R. 1917 A, 296.
Haseman, J. D. 1912 A, 97.
Ihering, H. 1909 A, 289.
Jordan, D. S. 1903 A, 137.
1905 A, ii, 381.
1907 B, 592.
1923 A, 218.
1927 C, 147.
Meek, A. 1916 A, 313.
Regan, C. T. 1916 B, 547.
Schlosser, M. 1917 A, 144.
Toula, F. 1905 A, 69.
Woodward, A. S. 1901 A, 554.
Zittel and Koken 1911 A, 133.
Zittel and Schlosser 1923 A, 142.

Priscacara clivosa Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Eastman, C. R. 1917 A, 296.
Jordan, D. S. 1905 A, ii, 381.
1907 B, 592.
Merrill, G. P. 1907 A, 16.
Woodward, A. S. 1901 A, 554.
Eocene (Green River); Wyoming.

Priscacara cypha Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Merrill, G. P. 1907 A, 16.
Woodward, A. S. 1901 A, 555.
Eocene (Green River); Wyoming.

Priscacara dartonæ Eastman.

Eastman, C. R. 1917 A, 296, pl. xxiii.
Shufeldt, R. W. 1917 C, 50, fig.
Eocene (Green River); Wyoming.

Priscacara hypsacantha Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Hussakof, L. 1908 A, 90.
Eocene (Green River); Wyoming.

Priscacara oxyprion Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Eastman, C. R. 1917 A, 296.
Haseman, J. D. 1912 A, 100.
Hussakof, L. 1908 A, 90.
Merrill, G. P. 1907 A, 16.
Tanner, V. M. 1925 A, 12.
Woodward, A. S. 1901 A, 555.
Eocene (Green River); Wyoming.

Priscacara pealei Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Eastman, C. R. 1917 A, 296.
Merrill, G. P. 1907 A, 17.
Tanner, V. M. 1925 A, 12.
Woodward, A. S. 1901 A, 555.
Eocene (Green River); Wyoming, Utah.

Priscacara serrata Cope.

Hay, O. P. 1902 A, 401.
Cockerell, T. D. A. 1908 C, 178.
Eastman, C. R. 1917 A, 296.
Haseman, J. D. 1912 A, 97.
Hussakof, L. 1908 A, 92.
Jordan, D. S. 1927 C, 147.
Merrill, G. P. 1907 A, 17.
Toula, F. 1905 A, 69, fig. 3.
Woodward, A. S. 1901 A, 554.
Eocene (Green River); Wyoming.

Priscacara testudinaria Cope.

Hay, O. P. 1902 A, 402.
Eastman, C. R. 1917 A, 296.
Hussakof, L. 1908 A, 92.
Eocene (Manti); Utah.

Priscacara sp. indet.

Cope, E. D. 1884 O, 93. Eocene (Washakie); Wyoming.

COCKERELLITES Jordan. Type *Priscacara liops* Cope.

Jordan, D. S. 1923 A, 218.
1927 C, 147.

Cockerellites liops (Cope).

Hay, O. P. 1902 A, 401 (Priscacara).
Cockerell, T. D. A. 1908 C, 178 (Priscacara).
Eastman, C. R. 1917 A, 296 (Priscacara).
Hussakof, L. 1908 A, 70 (Priscacara).
Jordan, D. S. 1927 C, 147 (P. liops Cope).
Merrill, G. P. 1907 A, 16 (Priscacara).
Woodward, A. S. 1901 A, 555 (Priscacara).
Eocene (Green River); Wyoming.

CHROMIDIDÆ Bonaparte.

Bonaparte, C. L. 1840 A, 296.
Unless otherwise indicated the authors, as cited, use for this family the name Cichlidæ. Chromididæ appears to be older. Citations are made to the literature of the Pomacentridæ.
Hay, O. P. 1902 A, 401 (Pomacentridæ).
Arldt, T. 1907 D, 675 (Pomacentridæ).
Boulenger, G. A. 1904 A, 180.
1904 D, 670 (Cichlidæ); 672 (Pomacentridæ).
1917 B, 330.
1919 A, 42 ("cichlides" or "chromides").
Cockerell, T. D. A. 1913 B, 165 (Pomacentridæ, Cichlidæ).
1915 A, 31.
Cope, E. D. 1871 T, 459 (Pomacentridæ, Chromididæ).
1872 C, 343 (Pomacentridæ, Chromididæ).
Eastman, C. R. 1912 B, 372.
1917 A, 296.
Fitzinger, L. J. 1873 A, 31 (Pomacentri).
Gill, T. 1872 B, 7.
1885 B, 35 (Pomacentridæ); 235 (Cichlidæ).
Goode and Bean 1895 A, 243 (Pomacentridæ).
Goodrich, E. S. 1909 A, 446 (Pomacentridæ, Cichlidæ).
Günther, A. 1862 A, 1 (Pomacentridæ); 265 (Chromides).
Haseman, J. D. 1912 A, 97.
Jordan, D. S. 1903 A, 137 ("pomacentrids").
1905 A, ii, 381, 587 (Pomacentridæ); 380, 563 (Cichlidæ).
1907 B, 591 (Pomacentridæ, Cichlidæ).
1927 C, 147 (Cichlidæ).
Jordan and Evermann 1896 A, 1512.
Jordan and Gilbert 1882 A, 607.
Kner, R. 1861 B, 143 (Pomacentrini).
Leunis and Ludwig 1883 A, 704 (Pomacentridæ).
Loomis, F. B. 1921 A, 194.
Meek, A. 1916 A, 312.
Regan, C. T. 1913 B, 112 (Pomacentridæ); 112, 130 (Cichlidæ).
1916 B, 546.
1922 B, 249.
Richardson, J. 1854 A, 265 (Pomacentridæ).
1856 A, 265 (Chromididæ).
Shepherd, C. E. 1913 A, 388.
Stannius, H. 1854 A, 5, seq. (Chromides).
Wallace, A. R. 1876 A, ii, 437.
Woodward, A. S. 1901 A, 554 (Chromidæ); 555 (Pomacentridæ).
Zittel and Koken 1911 A, 133 (Pomacentridæ).
Zittel and Woodward 1902 A, 103 (Pomacentridæ).

KINDLEIA Jordan. Type *K. fragosa* Jordan.

Jordan, D. S. 1927 C, 145.

Kindleia fragosa Jordan.

Jordan, D. S. 1927 C, 145, figs. 1-14.
Russell, L. S. 1928 B, 264.
Upper Cretaceous (Paleocene, Paskapoo); Alberta.

PERCIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 89, 100.
Hay, O. P. 1902 A, 404.
Agassiz, L. 1840 C, 110, pl. iv, fig. 8 (Perca).
1844 D, 142 ("percoides").
Arldt, T. 1907 D, 672.
1912 A, 760.
1923 A, 680 ("perciden").
Bassoli, G. G. 1906 A, 51, pl. ii (otoliths).
Baudelot, E. 1873 A, 98, 130 (Perca).
Bonaparte, C. L. 1833 B, 1197.
1838 B, 132.
Boulenger, G. A. 1895 C, 1 (Perciformes).
1904 A, 179.
1904 D, 658.
Brauer, A. 1914 A, 284.
Bridge, T. W. 1896 A, 564.
Carlet, G. 1878 A, 8 ("perche").
Carus, V. 1875 A, 518 (Percoidei).
Cockerell, T. D. A. 1913 B, 143, 153.
Cunningham, J. T. 1912 A, 266.
Cuvier, G. 1805 A ("perches").
Dean, Gudger, Henn 1923 A, 694.
Dietz, P. A. 1914 A, 112.
Dormitzer, M. 1852 A, 62 ("perciden").
Duméril, A. 1856 A, 270 ("percoïdes").
Eastman, C. R. 1917 A, 294.
Fitzinger, L. J. 1873 A, 29 (Percæ).
Frost, G. A. 1927 A, 298 (Perca).
Fryd, C. 1901 A, 19.
Giebel, C. G. 1855 A, 100 (Percoidei).
Gill, T. 1875 B, 252.
1885 C, 227.
Goetsch, W. 1920 A, 439, 444 (Perca).
Goodrich, E. S. 1909 A, 441.
Hase, A. 1907 A.
1911 B, 339 (Perca).
Hasse, C. 1872 A, figs. (Perca).
Hasse and Schwarck 1870 A, 30 (Perca).
Heckel, J. 1850 B, 146 ("perciden").
Hoernes, R. 1886 A, 538 (Percoidei).
Hubbs, C. L. 1926 A, 58 ("percids").
Huxley, T. H. 1859 H, 37.
Jordan, D. S. 1905 A, ii, 304, 585.
1907 B, 519.
1923 A, 186.
Jordan and Gilbert 1882 A, 486.
Klaatsch, H. 1890 A, 193, 195 (Perca).
Klein, E. F. 1879 A, 69, 70, 81, 115.
1884 A, 135, 139, 181, 204.
1885 A, 133, 199.
1886 A, 205, 239, 275.
Kner, R. 1862 A, 65 (Percoidei).
Köstlin, O. 1844 A ("percoiden").
Kolzoff, N. K. 1896 A, 518, fig. 7 (Perca).
Leunis and Ludwig 1883 A, 660.
M'Donnell, R. 1864 A, 171.
Meckel, J. F. 1825 A (Perca).
Meek, A. 1916 A, 287.
Owen, R. 1866 A, 11, 378.
Porta, A. 1905 A, 240.

Priem, F. 1906 B, 269, figs. 11-25.
1914 B, 246, 256, figs. 3-5, 23-31 ("percidarum").
Regan, C. T. 1913 B, 116.
Richardson, J. 1836 A, 30 (Percoideæ).
Rosén, N. 1915 A, 6, pl. i (Perca).
Sachs, M. M. 1912 A, 726.
Sagemehl, M. 1884 A, 102 (Perca).
Salbey, R. 1868 A, 748, pl. xviii.
Scharff, R. F. 1909 B, 18.
1911 A, 198.
Schlosser, M. 1917 A, 140, 142 ("perciden").
Schubert, R. J. 1906 A, 625.
Siebenrock, F. 1901 A, 106.
Stannius, H. 1849 A, 539 (Perca).
1854 A, 4, seq. (Percoidei).
Starks, E. C. 1916 A, 29 ("percoid fishes").
Stephan, P. 1900 A, 301 (Perca).
Storms, R. 1896 A, 212.
Supino, F. 1904 A, 628.
Tomes, O. S. 1876 A, 262, pl. xxxi ("perch").
Vaillant, L. 1874 A, 406 ("percoides").
Wagner, R. 1843 A (Perca).
Wallace, A. R. 1876 A, ii, 425.
Weber, E. H. 1821 A, 1080 (Perca).
Weiler, W. 1922 A, 76 (otoliths).
Williamson, W. C. 1851 A, 651, 690, pl. xxviii, figs. 10-12 ("perch").
Woodward, A. S. 1901 A, 498.
Zittel and Koken 1911 A, 132.
Zittel and Schlosser 1923 A, 141, figs. 16, 26.
Zittel and Woodward 1902 A, 104.

Mioplosus Cope. Type *M. labracoides* Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 177.
Eastman, C. R. 1917 A, 294.
Hussakof, L. 1916 C, 348.
Seeley, H. G. 1886 A, 412.
Woodward, A. S. 1901 A, 517.

Mioplosus abbreviatus Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 177.
Hussakof, L. 1908 A, 81, fig. 42.
Woodward, A. S. 1901 A, 518.
Eocene (Green River); Wyoming.

Mioplosus beani Cope.

Hay, O. P. 1902 A, 404.
Cockerell, T. D. A. 1908 C, 177.
Merrill, G. P. 1907 A, 13.
Woodward, A. S. 1901 A, 518.
Lower Eocene (Green River); Wyoming.

Mioplosus labracoides Cope.

Hay, O. P. 1902 A, 405.
Cockerell, T. D. A. 1908 C, 177.
Eastman, C. R. 1917 A, 294, pl. xxi.
Hussakof, L. 1908 A, 81.
Jordan, D. S. 1905 A, ii, 315.
Meek, A. 1916 A, 297.
Tanner, V. M. 1925 A, 6.
Toula, F. 1905 A, 70, fig. 4.
Woodward, A. S. 1901 A, 517.
Lower Eocene (Green River); Wyoming.

Mioplosus longus Cope.

Hay, O. P. 1902 A, 405.
Cockerell, T. D. A. 1908 C, 177.
Eastman, C. R. 1917 A, 295.
Merrill, G. P. 1907 A, 13.
Woodward, A. S. 1901 A, 518.
Lower Eocene (Green River); Wyoming.

Mioplosus sauvageanus Cope.

Hay, O. P. 1902 A, 405.
Cockerell, T. D. A. 1908 C, 177.
Woodward, A. S. 1901 A, 518.
Lower Eocene (Green River); Wyoming.

Eoperca Jordan. Type *Mioplosus multidentatus* Cope.

Jordan, D. S. 1919 A, 12.

Eoperca multidentatus (Cope).

Hay, O. P. 1902 A, 405 (Mioplosus).
Eastman, C. R. 1917 A, 295 (Mioplosus).
Jordan, D. S. 1919 A, 12.
Woodward, A. S. 1901 A, 518 (Mioplosus).
Tertiary (Oligocene?); Wyoming.

Plioplarchus Cope. Type *P. whitei* Cope.

Hay, O. P. 1902 A, 405.
Cockerell, T. D. A. 1914 A, 191.
Dall and Harris 1892 A, 281.
Eastman, C. R. 1917 A, 295.
Jordan, D. S. 1907 B, 519.

Plioplarchus septemspinosus Cope.

Hay, O. P. 1902 A, 405.
Cockerell, T. D. A. 1914 A, 191.
Dall and Harris 1892 A, 281.
Eastman, C. R. 1917 A, 295, pl. xxii.
Merriam, J. C. 1901 A, 308 ("Plioplarchus").
Merriam and Sinclair 1907 A, 196.
Merrill, G. P. 1907 A, 16.
Woodward, A. S. 1901 A, 520.
Miocene (Mascall?); Oregon.

Plioplarchus sexspinosus Cope.

Hay, O. P. 1902 A, 405.
Eastman, C. R. 1917 A, 295, pl. xv, fig. 1.
Merrill, G. P. 1907 A, 16.
Woodward, A. S. 1901 A, 520.
Tertiary; North Dakota.

Plioplarchus whitei Cope.

Hay, O. P. 1902 A, 405.
Dall and Harris 1892 A, 281.
Eastman, C. R. 1917 A, 295.
Jordan, D. S. 1920 C, 422 (P. whitii).
Merrill, G. P. 1907 A, 16.
Woodward, A. S. 1901 A, 520.
Tertiary; North Dakota.

OLIGOPLARCHUS Cope. Type *O. squamipinnis* Cope.

Hay, O. P. 1902 A, 405.

Oligoplarchus squamipinnis Cope.

Hay, O. P. 1902 A, 405.

Cockerell, T. D. A. 1914 A, 191.
Woodward, A. S. 1901 A, 519.
Oligocene?; South Dakota.

STOMIATIDÆ Günther.

Günther, A. C. 1864 A, 424.
Boulenger, G. A. 1904 D, 570.
Jordan, D. S. 1885 A, 140.
1905 A, ii, 128.
Jordan, D. S. 1923 A, 126.
Jordan and Evermann 1896 A, 587.
Jordan and Gilbert 1882 A, 285.
Regan, C. T. 1923 A, 614.

EOSTOMIAS Jordan and Gilbert. Type *E. eximius* Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 13.

Eostomias eximius.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 13, pl. iii.
Miocene (Monterey); California.

POMATOMIDÆ Gill.

Gill, T. 1865, Canad. Natural., Geol. (n. s.), 246, 249.
Boulenger, G. A. 1904 D.
Dean, Gudger, Henn 1923 A, 649 (Pomatominæ).
Gill, T. 1883 F, 557.
1885 C, 182.
Jordan, D. S. 1905 A, ii, 278.
1907 B, 493 (Cheilodipteridæ).
1923 A, 186.
Jordan and Evermann 1898 A, 945.
Jordan and Gilbert 1882 A, 447.
Regan, C. T. 1913 B, 117.

LOPHAR Jordan and Gilbert. Type *L. miocænus* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 44, 47.
Jordan, D. S. 1921 A, 277.
1925 B, 26.

Lophar miocænus Jordan and Gilbert.

Jordan and Gilbert 1919 A, 44, pl. iii, fig. 2, pls. xix, xx.
Jordan, D. S. 1921 A, 277.
Miocene (Monterey); Ca'ifornia.

ELEPHENORIDÆ Jordan.

Jordan, D. S. 1919, Ann. Carnegie Mus., xii, 330.

Jordan, D. S. 1925 B, 45.

ABANTIS Jordan and Gilbert. Type *A. velifer* Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 B, 45.

Abantis velifer Jordan and Gilbert.

Jordan and Gilbert, J. Z., in Jordan, D. S. 1925 45, pls. xx, xxi.
Upper Miocene; California.

SERRANIDÆ Richardson.

Richardson, J. 1846 A, 229.
Agassiz, L. 1840 C, 103, pl. v, fig. 22 (Serranus).
Arldt, T. 1923 A, 681 ("serraniden").
Boulenger, G. A. 1895 C, 113.
1901 A, 270.
1901 D, 379.
1904 D, 659, 755.
Carus, V. 1875 A, 519 (Serranina).
Cockerell, T. D. A. 1913 B, 143, 158.
Dean, Gudger, Henn 1923 A, 402, 648.
Fitzinger, L. J. 1873 A, 30 (Serrani).
Geoffroy St. Hilaire, E. F. 1824 D, 422, pl. xxi (Serranus).
Gill, T. 1872 C, 11.
1885 B, 35.
1885 C, 223.
Goodrich, E. S. 1909 A, 430.
Günther, A. C. 1859 A, 51, 81 (Serranina).
Hubbs, C. L. 1919 B, 71.
Jordan, D. S. 1905 A, ii, 592.
1907 B, 534.
1923 A, 193.
Jordan and Evermann 1896 A, 1126.
Jordan and Gilbert 1882 A, 526.
Kesteven, H. L. 1922 A, 308.
Klein, E. F. 1879 A, 81 (Serranina).
1885 A, 174 (Serranus).
Meek, A. 1916 A, 291.
Priem, F. 1906 B, 267 (Serranus).
1908 B, 112 ("serranidés").
1914 B, 248, 260, figs. 7, 32-40 ("otoliths").
Regan, C. T. 1913 B, 113.
Schlosser, M. 1917 A, 142 ("serraniden").
Schmalhausen, J. J. 1916 C, 214, figs. 1-5 (Serranus).
Shepherd, C. E. 1916 A, 204.

Starks, E. C. 1909 A, 573.
Stephan, P. 1900 A, 321 (Serranus).
Storms, R. 1896 A, 211.
Vaillant, L. 1874 A, 407 (Serranus).
Zittel and Sch'osser 1923 A, 139.

EMMACHÆRE Jordan and Gilbert. Type *E. rhachites* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 59.
Jordan, D. S. 1927 B, 93 (Referred to the Epinephalidæ).
Jordan and Gilbert 1920 A, 26.

Emmachære rhachites Jordan and Gilbert.

Jordan and Gilbert 1919 A, 59, pl. xxviii, fig. 2.
1920 A, 26, pl. xv.
Jordan, D. S. 1921 A, 277.
Miocene (Monterey); California.

Emmachære rhomalea Jordan.

Jordan, D. S. 1921 A, 278, pl. xliii.
1922 D, 273, fig. 5.
1925 B, 30.
1927 B, 93.
Jordan and Gilbert 1920 A, 26 (in part), pl. xvi (E. rhachites; not E. rhachites Jordan and Gilbert, 1919 A, pl. xxviii.
Miocene (Monterey); California.

APOGONIDÆ Jordan and Gilbert.

Jordan and Gilbert 1882 A, 563.
Dean, Gudger, Henn 1923 A, 375, 579, 601 (Apogon).
Frost, G. A. 1927 A, 302, pl. v.
Günther, A. C. 1859 A, 222 (Apogonina).
Jordan, D. S. 1905 A, ii, 316.
1907 B, 531.
1923 A, 188.
Jordan and Evermann 1896 A, 1105 (Cheilodipterinæ).
Shepherd, C. E. 1916 A, 183, 204 (Apogon).

ERITIMA Jordan and Gilbert. Type *E. evides* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 40.

Eritima evides Jordan and Gilbert.

Jordan and Gilbert 1919 A, 40, pl. xxviii, fig. 1.
Jordan, D. S. 1921 A, 277, pl. xlii.
Miocene (Monterey?); California.

CARANGIDÆ Günther.

Günther, A. C. 1860 A, 417.
Hay, O. P. 1902 A, 403.
Abel, O. 1912 F, 127 ("carangiden").
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 643.
1923 A, 689 ("carangiden").
Boulenger, G. A. 1902 B, 299.
1904 A, 181.
1904 D, 677.
1917 B, 329.
Bridge, T. W. 1896 A, 569.
Carus, V. 1875 A, 532 (Carangoidei).
Cockerell, T. D. A. 1913 B, 149.
Dean, Gudger, Henn 1923 A, 590, 651, 652.
Dietz, P. A. 1914 A, 124.
Fitzinger, L. J. 1873 A, 33 (Caranges).
Frost, G. A. 1927 A, 302 pl. v.
Fryd, C. 1901 A, 21.
Gill, T. 1883 G, 487, 492.
1885 B, 35.
1885 C, 187.
Goodrich, E. S. 1909 A, 464
Günther, A. C. 1881 A, 689.
Jordan, D. S. 1905 A, ii, 272, 561.
1907 B, 487.
1923 A, 184.
Jordan, D. S. 1925 B, 26.
Jordan and Gilbert 1882 A, 430.
Klein, E. F. 1884 A, 135, 139, 181, 213.
1885 A, 109, 138, 163, 199, 200, 203, 231 (Carangidæ, Carangina).
1886 A, 211, 244, 281.
Kner, R. 1861 A, 776 ("carangiden").
Leriche, M. 1910 D, 305.
Leunis and Ludwig 1883 A, 680.
Meek, A. 1916 A, 315.
Regan, C. T. 1909 A, 67, 68.
1912 B, 850.
1913 B, 118.
Schlosser, M. 1917 A, 139, 140, 142 ("carangiden").
Shepherd, C. E. 1911 A, 138.
Siebenrock, F. 1901 A, 107.
Starks, E. C. 1909 A, 572.
1911 B, 27.
1916 A, 28.
Toula, F. 1905 A, 75.
Wallace, A. R. 1876 A, ii, 429.
Woodward, A S. 1901 A, 418, 427.
Zittel and Koken 1911 A, 137.
Zittel and Schlosser 1923 A, 145.
Zittel and Woodward 1902 A, 107.

CARANX Lacepède. Type *Scomber carangus* Bloch.

Lacepède, B. G. 1802, Hist. Nat. Poissons, iii, 57.
Cockerell, T. D. A. 1913 B, 149, pl. xxxvi, fig. 27.
Dean, Gudger, Henn 1923 A, 673.
Dietz, P. A. 1914 A, 125, fig. 13.
Edgeworth, F. H. 1926 A, 186.
Fryd, C. 1901 A, 21.
Goetsch, W. 1920 A, 494, pl. xxii.
Hay, O. P. 1923 A, 383.
Jordan and Evermann 1896 A, 915.
1917 A, 60.

Jordan and Gilbert 1882 A, 433, 970.
Klein, E. F. 1879 A, 95.
1886 A, 244.
Lütken, C. F. 1881 A, 114.
Meek, A. 1916 A, 315.
Owen, R. 1845 B, 121.
Shepherd, C. E. 1910 B, 292, pl. i, fig. 7.
1911 A, 140.
Siebenrock, F. 1901 A, 107.
Stannius, H. 1854 A.
Starks, E. C. 1911 B, 32.
Woodward, A. S. 1901 A, 441.

Caranx hippos Linnæus.

Hay, O. P. 1917 E, 43.
1923 A, 382.
Jordan and Evermann 1896 A, 920, pl. clxi, fig. 387.
Siebenrock, F. 1901 A, 107.
Pleistocene; Florida.

Caranx sp. indet.

Hay, O. P. 1923 A, 382. Pleistocene; Florida.

HEMICARANX Bleeker. Type *H. marginatus*.

Bleeker, P. 1862, Verh. Akad. Amsterdam, xiv, 134.
Jordan and Evermann 1896 A, 912.

Hemicaranx archæus Jordan.

Jordan, D. S. 1927 B, 92.
Upper Miocene (Lompoc); California.

SERIOLIDÆ Jordan.

Jordan, D. S. 1925 B, 26.

TUNITA Jordan and Gilbert. Type *T. octavia* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 42.
Jordan, D. S. 1925 B, 29.
Jordan and Gilbert 1920 A, 13.

Tunita octavia Jordan and Gilbert.

Jordan and Gilbert 1919 A, 42, pl. xii, fig. 2.
Jordan, D. S. 1921 A, 271, pl. xxxix.
Jordan, D. S. 1925 B, 29.
Miocene (Monterey); California.

Tunita sp. indet.

Jordan, D. S. 1921 A, 271. Miocene? California.
1925 B, 45. Miocene (Puente); California.

SERIOLA Cuvier. Type *Caranx dumerili* Risso.

Cuvier, G. 1829, Règne Anim., ed. 2, II, 218.
Gill, T. 1885 C, 190.
Goodrich, E. S. 1909 A, 464.
Günther, A. C. 1860 A, 462.
Jordan, D. S. 1905 A, ii, 272.
1907 B, 487.
1921 A, 276.
1925 B, 26.
Jordan and Evermann 1896 A, 901.
Jordan and Gilbert 1882 A, 444.
Woodward, A. S. 1901 A, 444.
Zittel, K. A. 1890 A, 305.

Seriola sanctæ-barbaræ Jordan.

Jordan, D. S. 1921 A, 275, pls. vii, xl.
Miocene (Monterey); California.

Seriola sanctæ-ineziæ Jordan.

Jordan, D. S. 1925 B, 26, pl. xiii.
Miocene (Monterey); California.

ALICIOLA Jordan. Type *A. starksi* Jordan.

Jordan, D. S. 1925 B, 27.

Aliciola starksi Jordan.

Jordan, D. S. 1925 B, 27, pl. xiv.
Miocene (Monterey); California.

LOMPOCHITES Jordan. Type *Lompochites hopkinsi* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 30, 45.
1925 B, 26, 29.

Lompochites hopkinsi Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 30.
Jordan, D. S. 1921 A, 276, pl. xli, fig. *b*.
1922 D, 272, fig. 4.
1925 B, 29.
1927 B, 92.
Miocene (Monterey); California.

CORONADUS Jordan. Type *C. agilis* Jordan.

Jordan, D. S. 1925 B, 28.

Coronadus agilis Jordan.

Jordan, D. S. 1925 B, 28, pl. xiv.
1927 B, 92.
Miocene (Monterey); California.

Coronadus stocktoni Jordan.

Jordan, D. S. 1927 B, 92.
Upper Miocene (Lompoc); California.

IRIFERA Jordan. Type *I. ringens* Jordan.

Jordan, D. S. 1927 B, 7.

Irifera ringens Jordan.

Jordan, D. S. 1927 B, 91.
Upper Miocene (Lompoc); California.

LUTIANIDÆ Gill.

Gill, T. 1884 G, 352 (Lutjaninæ, Lutjanidæ).
Cockerell, T. D. A. 1913 B, 160.
Dean, Gudger, Henn 1923 A, 590, 649 (Lutjaninæ).
Gill, T. 1885 C, 222 (Lutjanidæ).
1893 A, 134 (Lutjanidæ).
Gill, T. 1893 B, 116 (Lutjanidæ).
Jordan, D. S. 1923 A, 195.
Jordan and Evermann 1898 A, 1241.
Jordan and Gilbert 1882 A, 546 (Lutjaninæ).
Regan, C. T. 1913 B, 120.

NEOMÆNIS Girard. Type *Lobotes emarginatus* Baird and Girard = *Labrus griseus* Linn.

Girard, C. F. 1859, Proc. Acad. Nat. Sci. Phila., 1858 (1859), 167.
Girard, C. F. 1859, Mex. Bound. Surv., Zool., Fishes, 18.
Jordan, D. S. 1921 A, 278.
Jordan and Evermann 1898 A, 1247.

Neomænis hagari (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 48, pl. xiv, figs. 1, 4 (Lutianus).
Jordan, D. S. 1921 A, 278, pl. xlvi.
Miocene (Monterey); California.

SPARIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 91, 105.
Hay, O. P. 1902 A, 405.
Agassiz, L. 1844 D, 142 ("sparoïdes").
Allis, E. P. 1909 A, 201, 202.
Arldt, T. 1907 D, 682.
1923 A, 683 ("spariden").
Bassoli, G. G. 1906 A, 52, pl. ii (otoliths).
Bonaparte, C. L. 1833 B, 1198.
1838 B, 132.
Boulenger, G. A. 1904 A, 180.
1917 B, 329.
Bridge, T. W. 1896 A, 566.
Bronn, H. G. 1849 A, 780, seq. (Sparoidei).
Carus, V. 1875 A, 525 (Sparoidei).
Cockerell, T. D. A. 1913 B, 160.
Cuvier, G. 1805 A ("spares").
Dean, Gudger, Henn 1923 A, 418, 503, 650.
Dietz, P. A. 1914 A, 112.
Fitzinger, L. J. 1873 A, 31 (Spari).
Fowler, H. W. 1911 A, 181.
Fulton, T. W. 1906 A, 54.
Giebel, C. G. 1855 A, 101 (Sparoidei).
Gill, T. 1885 C, 218.
Goetsch, W. 1920 A, 439 (Sparus).
Goodrich, E. S. 1909 A, 428.
Günther, A. C. 1881 A, 688.
Hasse, C. 1873 A, 599 ("sparoiden").
Heckel, J. 1850 B, 146 ("spariden").
Hoernes, R. 1886 A, 536 (Sparoidei).
Huxley, T. H. 1859 H, 37.
Jordan, D. S. 1905 A, ii, 342, 593.
1907 B, 556.
1923 A, 197.
Klein, E. F. 1879 A, 69, 120 ("sparoiden").
Klein, E. F. 1884 A, 135, 206.
1885 A, 109, 133, 199, 225.
1886 A, 207, 239, 276.
Köstlin, O. 1844 A ("sparoiden").
Kner, R. 1862 A, 49 (Sparoidei).
Leunis and Ludwig 1883 A, 670.
M'Donnell, R. 1864 A, 168.
Meckel, J. F. 1825 A ("sparen").
Meek, A. 1916 A, 301.
Mummery, J. H. 1917 A, 251.
Owen, R. 1866 A.
Priem, F. 1906 B, 273, figs. 36-37.
1908 B, 82, 100 ("sparidés").
1914 B, 264, figs. 45-52 ("otolithus").
Regan, C. T. 1913 B, 124.
Schlosser, M. 1917 A, 142 ("spariden").
Schubert, R. J. 1906 A, 630.
Shepherd, C. E. 1910 A, 419.
1911 A, 450.
1916 A, 178, 204.
Siebenrock, F. 1901 A, 106.
Stannius, H. 1854 A, 4, seq. (Sparoidei).
Stephan, P. 1898 A, 359 ("sparides").
1900 A, 300, 314 ("sparidés").
Terra, P. 1911 A, 216.
Tomes, C. S. 1877 A, 45.
Wagner, R. 1843 A (Sparus).
Wallace, A. R. 1876 A, ii, 426.
Weiler, W. 1922 A, 76 (otoliths).
Whitehouse, R. H. 1910 B, 612, pl. xlix, fig. 20.
Woodward, A. S. 1901 A, 524.
Zittel and Koken 1911 A, 135.
Zittel and Schlosser 1923 A, 139.
Zittel and Woodward 1902 A, 105.

CROMMYODUS Cope. Type *Phacodus irregularis* Cope.

Hay, O. P. 1902 A, 405.
Fowler, H. W. 1911 A, 182.
Jordan, D. S. 1919 B, 356.

Crommyodus irregularis Cope.

Hay, O. P. 1902 A, 405.
Fowler, H. W. 1911 A, 182.
Kümmel, H. B. 1911 A, 183.
Woodward, A. S. 1901 A, 553.
Miocene (Kirkwood); New Jersey.

ATKINSONELLA Jordan. Type *A. strigilis* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 41.

To what family this genus belongs is somewhat uncertain.

Atkinsonella strigilis Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert 1920 A, 41.
1921 A, 281, pl. v, fig. *b;* pl. xli, fig. *a.*
Miocene (Monterey); California.

RHYTHMIAS Jordan and Gilbert. Type *Rhythmias starrii* Jordan and Gilbert.

Jordan and Gilbert 1920 A, 27.
Jordan, D. S. 1921 A, 279.

Rhythmias starrii Jordan and Gilbert.

Jordan and Gilbert 1920 A, 28, pl. xvii.
Jordan, D. S. 1921 A, 279, pl. xliv.
1922 D, 273, fig. 6.
1925 B, 31.
1927 B, 93.
Miocene (Monterey); California.

ERIQUIUS Jordan. Type *E. plectrodes* Jordan.

Jordan, D. S. 1924 B, 44.

Eriquius plectrodes Jordan.

Jordan, D. S. 1924 B, 44, pl. H.
Jordan, D. S. 1925 B, 30, pl. xv.
Miocene (Monterey); California.

PLECTRITES Jordan. Type *Plectrites classeni* Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 29, 45.
1921 A, 280.

Plectrites classeni Jordan.

Jordan, D. S. 1920, in Jordan and Gilbert, 1920 A, 13, pl. xviii.
1921 A, 280, pl. xlv.
1925 B, 31, pl. xvi.
Miocene (Monterey); California.

SCIÆNIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 90, 105.
Hay, O. P. 1902 A, 405.
Agassiz, L. 1844 D, 142 ("scienoïdes").
Allis, E. P. 1909 A, 27 (Sciæna).
Arldt, T. 1907 D, 680.
1912 A, 760.
1923 A, 683.
Bassoli, G. G. 1906 A, 47, pl. ii (otoliths).
Bonaparte, C. L. 1833 B, 1198.
Boulenger, G. A. 1901 D, 384.
1904 D, 663, 755.
Bronn, H. G. 1848 B, 1123 (Sciaenoidei).
Carus, V. 1875 A, 530 (Sciænoidei).
Cockerell, T. D. A. 1913 B, 143, 162.
Cuvier, G. 1805 A ("sciènes").
Dean, Gudger, Henn 1923 A, 364, 402, 595.
Dietz, P. A. 1914 A, 112.
Duméril, A. 1856 A, 288 ("sciènoides").
Fitzinger, L. J. 1873 A, 31 (Sciænæ).
Giebel, C. G. 1855 A, 101 (Sciænoidei).
Gill, T. 1885 C, 213.
Goodrich, E. S. 1909 A, 431.
Günther, A. 1880 A, 426 (Sciæniformes, Sciænidæ).
1881 A, 689.
Heckel, J. 1850 B, 146 ("sciæniden").
Huxley, T. H. 1859 H, 37.
Jordan, D. S. 1905 A, ii, 353, 591.
1907 B, 567.
1923 A, 201.
Jordan and Gilbert 1882 A, 566.
Klein, E. F. 1879 A, 69 ("sciænoiden").
1884 A, 135, 184, 211.
1885 A, 109, 111, 135, 199.
1886 A, 210, 242, 278.
Kner, R. 1862 A, 52 (Sciænoidei).
Köstlin, O. 1844 A ("sciänoiden").
Leunis and Ludwig 1883 A, 676.
Meckel, J. F. 1825 A (Sciæna).
Meek, A. 1916 A, 298.
Owen, R. 1848 B, pl. i, fig. 2 (Pristopoma).
Priem, F. 1914 B, 267, figs. 53-64 ("sciænadarum"; "otolithus").
Regan, C. T. 1913 B, 122.
Richardson, J. 1836 A, 61 (Sciænoideæ).
Sauvage, H. E. 1877 A, 154.
Schubert, R. J. 1902 A, 301 ("sciæniden").
1906 A, 635.
Shepherd, C. E. 1910 B, 296.
1912 A, 450.
1916 A, 178.
Siebenrock, F. 1901 A, 107.
Smith, B. 1909 A, 275.
Stannius, H. 1854 A, 4, seq. (Sciænoidei).
Terra, P. 1911 A, 216.
Tomes, C. S. 1878 A, 38 (Sargus).
1900 A, 36 (Sargus).
Wagner, R. 1843 A (Sciæna).
Wallace, A. R. 1876 A, ii, 428.
Weiler, W. 1922 A, 75 (otoliths).
Woodward, A. S. 1901 A, 538.
Zittel and Koken 1911 A, 132.
Zittel and Schlosser 1923 A, 139.

POGONIAS Lacepède. Type *P. fasciatus* Lacepède = *Labrus cromis* Linn.

Hay, O. P. 1902 A, 405.
Arldt, T. 1923 A, 683.
Boulenger, G. A. 1904 D, 663, 751.
Dean, Gudger, Henn 1923 A, 595, 650.
Duméril, A. 1856 A, 292.
Giebel, C. G. 1855 A, 101.
Gill, T. 1885 B, 34.
Jordan and Evermann 1917 A, 61.
Leunis and Ludwig 1883 A, 676.
Sauvage, H. E. 1877 A, 156.
Smith, B. 1909 A, 275.

Pogonias cromis (Linn.).

Hay, O. P. 1902 A, 405.
Boulenger, G. A. 1904 D, 663 (P. chromis).
Günther, A. C. 1880 A, 427, fig. 187.
Jordan, D. S. 1905 A, ii, 357 (P. chromis).
Smith, B. 1909 A, 277, figs. 3, 4, 7-9.
Recent; Long Island to Mexico: Pleistocene (Ashley River); South Carolina.

Pogonias multidentatus Cope.

Hay, O. P. 1902 A, 406.
Clark and Miller 1912 A, 167, 168.
Hussakof, L. 1908 A, 88, pl. v, fig. 13.
Smith, B. 1909 A, 275, figs. 10-13.
Woodward, A. S. 1901 A, 538.
Miocene; Virginia.

Pogonias sp. indet.

Hay, O. P. 1902 A, 406. Eocene?; South Carolina.

OTOLITHIDÆ Jordan.

Jordan, D. S. 1921 A, 282.
Arldt, T. 1923 A, 683 (Otolithus).
Boulenger, G. A. 1901 D, 384 (Otolithus).
Jordan, D. S. 1923 A, 202.
Shepherd, C. E. 1910 B, 296, pl. i, fig. 17 (Otolithus).

LOMPOQUIA Jordan and Gilbert. Type *L. retropes* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 49.
Jordan, D. S. 1921 A, 282.
Jordan, D. S. 1922 D, 274, fig. 7.
1924 B, 47, pl. K.
1925 B, 32.
Jordan and Gilbert 1920 A, 30, pl. xix.
Miocene (Montêrey); California.

Lompoquia retropes Jordan and Gilbert.

Jordan and Gilbert 1919 A, 49, pl. xxiv, fig. 1.
Jordan, D. S. 1921 A, 281, pl. xlvii.

ARISTOSCION Jordan. Type *A. emprepes* Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 282.

Aristoscion emprepes Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 282, 283, pl. vi, fig. *b;* pl. xlviii (A. eprepes).
Miocene (Monterey); California.

IOSCION Jordan. Type *I. morgani* Jordan.

Jordan, D. S. 1921 A, 283.

Ioscion morgani Jordan.

Jordan, D. S. 1921 A, 283, pl. viii, fig. *a;* pl. xlix, fig. *a.*
Miocene (Monterey); California.

Suborder LABRIFORMES Regan.

Unless otherwise indicated the authors, as below quoted, use for this group the name Pharyngognathi.

Regan, C. T. 1913 B, 112, 132 (Labriformes, as "division").
Hay, O. P. 1902 A, 400.
Arldt, T. 1907 D, 672.
Bronn, H. G. 1849 A, 780, seq.
Carus, V. 1875 A, 546.
Cockerell, T. D. A. 1913 B, 166.
Cope, E. D. 1871 T, 456.
Fowler, H. W. 1911 A, 183.
Gill, T. 1873 F, 8 (Labroidea).
Greene, J. R. 1861 A, 228.
Günther, A. C. 1881 A, 691.
Jordan, D. S. 1905 A, ii, 384, 586.
1907 B, 595, 768.
Jordan, D. S. 1923 A, 221.
Klein, E. F. 1879 A, 69, 72.
1884 A, 130, 135 (Pharyngognathi).
1885 A, 222, 234.
1886 A, 213, 274, 285 (Pharyngognathi).
Kner, R. 1861 A, 247.
Leunis and Ludwig 1883 A, 703.
Lönnberg, E. 1901 A.
Müller, J. 1846 C, 131, 155, 199.
Owen, R. 1866 A, 10, 11.
Parker and Haswell 1897 A, 206.
Stannius, H. 1854 A, 5, seq.
Stephan, P. 1900 A, 314 ("pharyngognathes").
Zittel and Schlosser 1923 A, 142 (Pharyngognathi).
Zittel and Woodward 1902 A, 102.

LABRIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 93, 111.
Hay, O. P. 1902 A, 400.
Agassiz, L. 1844 D, 142 ("labroïdes").
Allis, E. P. 1909 A, 201.
Arldt, T. 1907 D, 661.
1923 A, 688 ("labriden").
Baudelot, E. 1873 A, 101 ("labroides").
Bonaparte, C. L. 1838 B, 132.
Boulenger, G. A. 1904 A, 181.
1904 D, 673, 744.
Bridge, T. W. 1896 A, 574.
Bronn, H. G. 1849 A, 780, seq.
Carus, V. 1875 A, 547 (Labroidei).
Cockerell, T. D. A. 1913 B, 166.
Cope, E. D. 1871 T, 459.
Creaser, C. W. 1926 A, 53.
Cuvier, G. 1805 A ("labres").
1815 A, 110 ("labres").
Dean, Gudger, Henn 1923 A, 686.
Dietz, P. A. 1914 A, 113, figs. 7, 9.
Fitzinger, L. J. 1873 A, 30 (Labri).
Fowler, H. W. 1911 A, 183.
Frost, G. A. 1928 A, 452, pl. xvii.
Fryd, C. 1901 A, 25.
Fulton, T. W. 1906 A, 61, pls. ii B, v.
Gill, T. 1885 B, 35.
1885 C, 237.
1905 A, 656 ("wrasses").
Goodrich, E. S. 1909 A, 446.
Günther, A. C. 1881 A, 691.
Haseman, J. D. 1912 A, 98.
Heckel, J. 1850 B, 146 ("labriden").
1856 A, 268 (Labroidei).
Hoernes, R. 1886 A, 534.
Jordan, D. S. 1903 A, 137 ("labroids").
1905 A, ii, 385, 577.
1907 B, 590.
1923 A, 221.
Jordan and Gilbert 1882 A, 597.
Klein, E. F. 1879 A, 66, 101.
1884 A, 130, 140, 222, 248.
1885 A, 108, 113, 141, 172, 199, 208, 235.
1886 A, 206, 207, 214, 250, 251, 285.
Kner, R. 1861 B, 140 (Labroidei).
Köstlin, O. 1844 A ("labroiden").
Leriche, M. 1900 A, 173.
Leunis and Ludwig 1883 A, 704.
Meckel, J. F. 1825 A (Labrus).
Meek, A. 1916 A, 306.
Müller, J. 1845 A, 102, 136 (Labroidei).
Mummery, J. H. 1917 A, 251, 260.
Priem, F. 1907 C, 82, 100, 115 ("labrides").
Pouchet, G. 1878 A, 41, 145, pl. v (Labrus).
Regan, C. T. 1913 B, 132, 134.
Richardson, J. 1836 A, 106 (Labroideæ).
Schlosser, M. 1917 A, 142 ("labriden").
Schmalhausen, J. J. 1916 C, 213.
Schubert, R. J. 1906 A, 652.
Shepherd, C. E. 1910 A, 419.
1911 A, 453.
Siebenrock, C. H. 1901 A, 107.
Stannius, H. 1854 A, 5 seq. (Labroidei).
Terra, P. 1911 A, 215.
Wallace, A. R. 1876 A, II, 437.
Whitehouse, R. H. 1910 B, 613, pl. xlix, fig. 21.
Woodward, A. S. 1901 A, 539.
Zittel and Koken 1911 A, 133.
Zittel and Schlosser 1923 A, 142.
Zittel and Woodward 1902 A, 103.

PROTAUTOGA Leidy. Type *P. conidens* Leidy.

Hay, O. P. 1902 A, 401.

Protautoga conidens Leidy.

Hay, O. P. 1902 A, 401.

Clark and Miller 1912 A, 167, 168 (P. conideus).
Woodward, A. S. 1901 A, 553.
Miocene, Virginia.

PHARYNGODOPILIDÆ Cocchi.

Cocchi, I. 1864 A, 329.
Hay, O. P. 1902 A, 400 (Labridæ, in part).
Jordan, D. S. 1923 A, 221 (Pharyngopilidæ).
Sauvage, H. E. 1875 B, 615 (Pharyngodopilidæ, Phyllodidæ).

NUMMOPALATUS Rouault. Type *N. edwardsius* Roualt.

Hay, O. P. 1902 A, 401.
Arldt, T. 1923 A, 688.
Gervais, F. L. 1857 Mém. Acad. Sci. Montpellier, III, 515 (Labrodon).
Jordan, D. S. 1919 B, 284 (Syn. of Labrodon Gervais).
Leriche, M. 1900 A, 174, 176.
Priem, F. 1901 A, 497.
1908 B, 101 (Labrodon).
Woodward, A. S. 1901 A, 541 (Syn. of Labrodon).
Zittel and Schlosser 1923 A, 142, fig. 245.
Zittel and Woodward 1902 A, 103.

Nummopalatus carolinensis (Leidy).

Hay, O. P. 1902 A, 401.
Woodward, A. S. 1901 A, 543 (Labrodon).
Tertiary (Phosphate beds); South Carolina.

PHYLLODUS Agassiz. Type *P. toliapicus* Agassiz.

Hay, O. P. 1902 A, 401.
Arldt, T. 1923 A, 688.
Boulenger, G. A. 1904 D, 674.
Bronn, H. G. 1849 A, 668.
Eastman, C. R. 1901 B, 112.
Fowler, H. W. 1911 A, 184.
Gervais, P. 1852 A, explan. pl. lxvii, lxviii.
1859 A, 516, pls. lxvii, lxviii.
Giebel, C. G. 1855 A, 106, pl. xlv, fig. 9.
Jordan, D. S. 1905 A, ii, 396.
Leriche, M. 1900 A, 174.
1905 A, 165.

Leriche, M. 1906 C, 419.
Priem, F. 1901 A, 494.
1908 B, 100, 115, fig. 58.
Sauvage, H. E. 1875 B, 615 (Phyllodus, Paraphyllodus).
Woodward, A. S. 1901 A, 546.
1922 C, 105, fig. 116.
Zittel and Koken 1911 A, 133.
Zittel and Schlosser 1923 A, 142, fig. 244.
Zittel and Woodward 1902 A, 103.

Phyllodus curvidens Marsh.

Hay, O. P. 1902 A, 401.
Eastman, C. R. 1901 B, 111, 113.
Fowler, H. W. 1911 A, 184.
Kümmel, H. B. 1911 A, 184.
Woodward, A. S. 1901 A, 550.
Miocene (Kirkwood); New Jersey.

Phyllodus elegans Marsh.

Hay, O. P. 1902 A, 401.
Eastman, C. R. 1901 B, 112.
Fowler, H. W. 1911 A, 184, fig. 108.
Kümmel, H. B. 1911 A, 168.
Woodward, A. S. 1901 A, 550.
Upper Cretaceous (Manasquan); New Jersey.

Phyllodus hipparionyx Eastman.

Eastman, C. R. 1901 B, 113.
Hay, O. P. 1902 A, 401.
Woodward, A. S. 1901 A, 617.
Eocene; Virginia.

Suborder Ephippiformes Jordan.

Jordan, D. S. 1923 A, 205.
Cockerell, T. D. A. 1913 B, 167.
Stannius, H. 1854 A (Squammipennes).
Steinmann, G. 1927 A, 450 ("squamipennes").

EPHIPPIDÆ Gill.

Gill, T. 1872 C, 8.
Hay, O. P. 1902 A, 400 (Chætodontidæ).
Boulenger, G. A. 1904 D, 668 (Chætodontidæ).
Cockerell, T. D. A. 1913 B, 167.
Dean, Gudger, Henn 1923 A, 513, 650 (Ephippus).
Frost, G. A. 1927 A, 304, pl. v.
Gill, T. 1885 C, 203.
Jordan, D. S. 1905 A, ii, 400 (Ephippidæ, Ilarchidæ).
1907 B, 611 (Ephippidæ, Ilarchidæ).
1923 A, 205.
Jordan and Evermann 1898 A, 1666.
Jordan and Gilbert 1882 A, 612.
Owen, R. 1848 B, 57, 147 (Ephippus).
Regan, C. T. 1913 B, 127.
Steinmann, G. 1927 A, 51 ("chaetodonten").
Woodward, A. S. 1901 A, 559 (Ephippus).

Chætodipterus Lacepède. Type *C. plumieri* Lacepède.

Hay, O. P. 1902 A, 400.
Arldt, T. 1923 A, 685 (Ephippus).
Dean, Gudger, Henn 1923 A, 415.
Duméril, A. 1856 A, 333 (Ephippus).
Gill, T. 1885 B, 34.
1885 C, 209.
Goodrich, E. S. 1909 A, 434, fig. 442 (Ephippus).
Jordan, D. S. 1903 A, 137.
1905 A, ii, 400, 562.
1907 B, 611.
Jordan and Evermann 1917 A, 64 (Chætodipterus); 105 (Ephippus).
Jordan and Gilbert 1882 A, 613.
Klein, E. F. 1885 A, 225 (Ephippus).
Kner, R. 1861 B, 129 (Ephippus).
Köstlin, O. 1844 A (Ephippus).
Owen, R. 1848 B, 57, 147 (Ephippus).
Priem, F. 1908 B, 116, fig. 59 (Ephippus).
Regan, C. T. 1913 B, 127 (Ephippus).
Stannius, H. 1854 A (Ephippus).
Steinmann, G. 1927 A, 51.
Stephan, P. 1900 A, 300 (Epihippus).

Chætodipterus faber (Brouss).

Hay, O. P. 1902 A, 400.
1923 A, 381.
Jordan, D. S. 1905 A, ii, 400.
Meek, A. 1916 A, 305 (Ephippus).
Recent; Cape Cod to Rio de Janeiro: Pleistocene; Florida.

PLATACIDÆ Jordan.

Jordan, D. S. 1905 A, ii, 401, 586.
Jordan, D. S. 1923 A, 204.

Platax Cuvier. Type *Chætodon teira* Bloch.

Cuvier, G. 1817, Règne Anim., II, 334.
Hay, O. P. 1902 A, 403.
Agassiz, L. 1843 B (1842), iv, 244.
Arldt, T. 1923 A, 685.
Bronn, H. G. 1848 B, 991.
Duméril, A. 1856 A, 351.
Eastman, C. R. 1901 B, 111.
Jordan, D. S. 1903 A, 137.
1905 A, ii, 401, 586.
Jordan and Evermann 1917 A, 105 (In Ephippidæ).
Klein, E. F. 1879 A, 94.
1884 A, 215.
1885 A, 112, 138, 171, 231.
1886 A, 206, 245.
Köstlin, O. 1844 A.
Leriche, M. 1906 C, 420.
Lütken, C. F. 1881 A, 118.
Newton, E. T. 1882 A, 122, pl. xix, figs. 1-3.
1891 A.
Owen, R. 1866 A, 39, 612.
Stannius, H. 1854 A, 4.

Woodward, A. S. 1901 A, 426, 432 (In Carangidæ).
Zittel and Koken 1911 A, 137.
Zittel and Schlosser 1923 A, 145.

Platax sp. indet.

Hay, O. P. 1902 A, 403. Pliocene?; South Carolina.

Order GOBIOMORPHI, new name.

Jordan, D. S. 1923 A, 224 (Gobioidea).
Regan, C. T. 1911 H, 731 (Gobioidea).

Suborder Gobiiformes Günther.

Günther, A. C. 1880 A, 483.
Arldt, T. 1923 A, 693 ("gobiiformen").
Boulenger, G. A. 1904 A, 183.
1904 D, 688.
Dean, Gudger, Henn 1923 A, 657.
Dietz, P. A. 1914 A, 129.
Goodrich, E. S. 1909 A, 447.
Günther, A. C. 1881 A, 690.
Jordan, D. S. 1905 A, ii, 459 (Gobioidei).
1907 B, 670.
1923 A, 224 (Gobioidea).
Regan, C. T. 1909 B, 81 (Gobioidei).
1911 H, 729 (Gobioidea).
1912 B, 850 (Gobioidei).
1913 B, 111 (Gobioidea).
Woodward, A. S. 1901 A, 587.
Zittel and Schlosser 1923 A, 143.

Superfamily GOBIOIDÆ, new form.

Dean, Gudger, Henn 1923 A, 590 (Gobioidea).
Gill, T. 1872 C, 6 (Gobioidea).
Gill, T. 1885 C, 255 (Gobioidea).
Jordan, D. S. 1907 B.

GOBIIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 93, 110 (Gobidæ).
Allis, E. P. 1909 A, 214.
Arldt, T. 1907 D, 656.
Bassoli, G. G. 1906 A, 54, pl. ii (Gobius, otoliths).
Boulenger, G. A. 1904 D, 689.
1917 B, 329.
Carus, V. 1875 A, 539 (Gobioidei).
Cockerell, T. D. A. 1913 B, 169.
Dean, Gudger, Henn 1923 A, 682.
Fiebiger, J. 1905 A, 140 (Gobii).
Gill, T. 1872 C, 7.
1885 C, 255.
Goodrich, E. S. 1909 A, 448 (Gobidæ).
Günther, A. C. 1861 A, 1.
1880 A, 485.
1881 A, 690.
Jordan, D. S. 1905 A, ii, 458.
1907 B, 670.
1923 A, 224.
Jordan and Evermann 1898 A, 2188.
Jordan and Gilbert 1882 A, 629.
Klein, E. F. 1879 A, 96, 115.
1884 A, 135, 147, 181, 216.
1885 A, 118, 175, 199, 235.
1886 A, 218, 254, 281.
Meek, A. 1916 A, 341.
Müller, J. 1846 C, 158 (Gobioidei).
Noorden, C. 1883 A, 235 (Gobius).
Norman, E. W. 1926 A, 407 (Gobius).
Owen, R. 1845 B, 102 ("gobioids").
Pouchet, G. 1875 A, 293, 297 (Gobius).
1878 A, 40, 55, figs. (Gobius).
Regan, C. T. 1903 B, 460.
1911 H, 731.
Sagemehl, M. 1884 A, 4.
Schlosser, M. 1917 A, 140, 143 ("gobiiden").
Shepherd, C. E. 1910 B, 295, pl. i, fig. 5 (Gobius).
1916 A, 204.
Siebenrock, F. 1901 A.
Solger, B. 1880 A, 376, 388 (Gobius).
Stannius, H. 1854 A, 4, seq. (Gobioidei).
Starks, E. C. 1911 A, 747.
Terra, P. 1911 A, 217.
Trouessart, E. L. 1906 A, 212.
Woodward, A. S. 1901 A, 587.
Zittel and Koken 1911 A, 134.
Zittel and Schlosser 1923 A, 143.

Aboma antiqua Jordan and Gilbert.*

Jordan and Gilbert 1919 A, 56, pl. xxix, fig. 1.
Duncker, G. 1923 A.
Jordan, D. S. 1926 B, 223 (Gobius?).
1927 A, 191.
1927 B, 97.

Order COTTOMORPHI, new name.

Hay, O. P. 1902 A, 406 (Pareioplitæ).
Allis, E. P. 1907 A, 568 ("mail-cheeked fishes," Loricati).
1909 A, 1-144 (Loricati, Craniomi).
1922 B, 194, 207 ("mail-cheeked fishes").
Arldt, T. 1923 A, 694 ("scleropareen").
Belling, D. E. 1912 A, 46 (Scleroparei).
Berg, L. S. 1906 A, 906 (Cataphracti).
1907 A, 1 (Cataphracti).
Boulenger, G. A. 1904 D, 692 (Scleroparei).
Cockerell, T. D. A. 1913 B, 170 (Scleroparei).
Eastman, C. R. 1911 C, 385 (Scleroparei).
Goetsch, W. 1920 A, 481 (Cataphracti).
Gutberlet, J. E. 1915 A, 1 (Loricati).
Jordan, D. S. 1903 A, 137 (Pareioplitæ).
1905 A, ii, 426, 585 (Pareioplitæ).
1907 B, 637 (Pareioplitæ); 769 (Scleroparei).
1923 A, 208 (Cataphracti).

* This name was applied, through an error, to Steindachner's *Gobius oblongus*, an Austrian fossil fish.

Kindred, J. E. 1919 A, 57 (Loricati).
Kner, R. 1862 A, 54 (Cataphracti).
Plate, L. 1926 A, 44 (Cataphracta).
Regan, C. T. 1913 A, 169, 170 (Scleroparei).
1913 B, 111 (Scleroparei).
Stannius, H. 1849 A, 540 ("cataphracten").
1854 A, 4, seq. (Cataphracti).
Steinmann, G. 1927 A, 80 (Cataphracti).
Whitehouse, R. H. 1910 B, 616 (Scleroparei).

Suborder SCORPÆNIFORMES Woodward.

Woodward, A. S. 1901 A, 576.
Jordan, D. S. 1923 A, 208.
Regan, C. T. 1912 B, 850 (Scorpænoidei).
1913 A, 169, 170 (Scorpænoidei).
Zittel and Schlosser 1923 A, 143.

SCORPÆNOIDÆ, new form.

Hay, O. P. 1902 A, 406 (Scorpænoidea).
Allis, E. P. 1919 E, 366 ("mail-cheeked fishes").
Goodrich, E. S. 1909 A, 449 (Scorpæniformes).
Jordan, D. S. 1923 A, 208 (Scorpæniformes).
Regan, C. T. 1912 B, 850 (Scorpænoidei).
1913 A, 170, 174 (Scorpæniformes).

SCORPÆNIDÆ Swainson.

Swainson, W. 1838 A, ii, 53, 56, 180.
Hay, O. P. 1902 A, 406.
Abel, O. 1906 C, 83, 84.
Allis, E. P. 1907 A, 570 (Scorpæna).
1909 A, 214, pls. i, ii (Scorpæna).
Arldt, T. 1907 D, 681.
1923 A, 694 ("scorpæniden").
Boulenger, G. A. 1904 D, 694.
Carus, V. 1875 A, 528 (Scorpænoidei).
Cockerell, T. D. A. 1913 B, 170.
Cuvier, G. 1815 A, 110 ("scorpènes").
Dean, Gudger, Henn 1923 A, 700.
Dietz, P. A. 1914 A, 134, fig. 20 (Scorpæna).
Fryd, C. 1901 A, 20.
Fulton, T. W. 1906 A, 54.
Gill, T. 1885 B, 35.
1885 C, 248.
Goodrich, E. S. 1909 A, 449.
Günther, A. C. 1881 A, 689.
Heckel, J. 1850 B, 146 ("scorpæniden").
Heilprin, A. 1887 A, 296.
Jordan, D. S. 1905 A, ii, 426, 591.
1907 B, 637.
1923 A, 208.
Jordan and Evermann 1898 A, 1758.
Jordan and Gilbert 1882 A, 650.
Kaup, J. J. 1873 A, 73-94.
Kesteven, H. L. 1926 B, 231.
Klein, E. F. 1884 A, 144, 206, 245 (Scorpæna).
1885 A, 109, 166, 201.
1886 A, 240, 277, fig. 17 (Scorpænina).
Leunis and Ludwig 1883 A, 672.
Mackintosh, N. A. 1923 A, 501.
Meckel, J. F. 1825 A (Scorpæna).
Meek, A. 1916 A, 345.
Norman, E. W. 1926 A, 412 (Sebastes).
Regan, C. T. 1913 A, 170, 172, 174.
Ridewood, W. G. 1904 A, 58.
Sauvage, H. E. 1873 A, 726.
Shepherd, C. E. 1913 A, 386.
Starks, E. C. 1916 A, 733, fig. 1 (Scorpæna).
Whitehouse, R. H. 1910 B, 616.
Woodward, A. S. 1901 A, 577.
Zittel and Koken 1911 A, 140.
Zittel and Schlosser 1923 A, 143.

Sebastavus vertebralis Jordan and Gilbert.

Jordan and Gilbert 1919 A, 50, pl. xxxi, fig. 1.
Duncker, G. 1923 A.
Jordan, D. S. 1926 B, 223 ("Sebastavus").
1927 A, 191.
1927 B, 97.

Through an error, this name was applied to Steindachner's *Gobius elongatus*, an Austrian fossil fish.

SEBASTODES Gill. Type *Sebastes paucispinis* Ayres.

Hay, O. P. 1902 A, 406.
Allis, E. P. 1909 A, 214.
Arldt, T. 1923 A, 694.
Ayres, W. O. 1863 A, 391, 393, 398.
Cockerell, T. D. A. 1913 B, 170.
Cockerell and Moore 1910 B, 93.
Cramer, F. 1895 A, 573, pls. lvii-lxx.
Dean, Gudger, Henn 1923 A, 593, 658.
Gill, T. 1865 C, 145.
Huntsman, A. G. 1919 A, 592.
Jordan, D. S. 1905 A, ii, 428, 591.
1907 B, 640.
1919 C, 336.
1921 A, 286.
Jordan and C. Gilbert 1882 A, 652.
Jordan and J. Z. Gilbert 1920 A, 31.
Meek, A. 1916 A, 345.

Sebastodes rosæ Eigenmann.

Hay, O. P. 1902 A, 406.
Cramer, F. 1895 A, 589 (This genus?).
Hay, O. P. 1927 D, 199.
Jordan, D. S. 1907 A, 134.
1907 B, 649.
Jordan and J. Z. Gilbert 1919 A, 63.
Woodward, A. S. 1901 A, 579.
Tertiary (Pliocene?); California.

SEBASTINUS Jordan. Type *Rixator ineziæ* Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 287.
1925 B, 36.

Sebastinus ineziæ Jordan.

Jordan, D. S., in Jordan and Gilbert 1920 A, 34, pl. xxii, fig. 2 (Rixator).

Jordan, D. S., in Jordan and Gilbert 1921 A, 287, pl. liv.
1922 D, 674, fig. 8.
1925 B, 37, pl. xix.
Miocene (Monterey); California.

SEBASTOËSSUS Jordan. Type *S. apostates* Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 285.
1925 B, 36.

Sebastoëssus apostates Jordan.

Jordan, D. S. 1920 C, 571.
1921 A, 285, pl. xiv, fig. *a*; pl. liii.
1925 B, 36.
Miocene (Monterey); California.

Sebastoëssus haroldi Jordan.

Jordan, D. S. 1925 B, 37, pl. xix.
Miocene (Monterey); California.

Sebastoëssus sp. indet.

Jordan, D. S. 1921 A, 288. Miocene (Monterey); California.

RIXATOR Jordan and Gilbert. Type *Rixator porteousi* Jord. and Gilb.

Jordan and Gilbert 1920 A, 31.
Jordan, D. S. 1921 A, 285, 287.

Rixator porteousi Jordan and Gilbert.

Jordan and Gilbert 1920 A, 33, pls. xxi, xxii, xxiii.

Jordan, D. S. 1920 A, 22, fig. 5.
1921 A, 284, 286, pl. lii.
1925 B, 38.
Jordan and Gilbert 1919 A, pl. xxii (Ectasis proriger).
Miocene (Monterey); California.

RHOMARCHUS Jordan and Gilbert. Type *R. ensiger* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 51.

Rhomarchus ensiger Jordan and Gilbert.

Jordan and Gilbert 1919 A, 51, pl. xxxi, fig. 5.

Jordan, D. S. 1921 A, 288, pl. lv.
Miocene (Monterey); California.

HEXAGRAMMOIDÆ, new form.

Jordan, D. S. 1923 A, 210 (Hexagrammiformes).

ANOPLOPOMIDÆ Gill.

Gill, T. 1885 C, 253.
Boulenger, G. A. 1904 D, 697 (Comephoridæ, in part).
Dean, Gudger, Henn 1923 A, 658 (Anoploma).
Jordan, D. S. 1905 A, ii, 438.
1907 B, 649.
Jordan, D. S. 1921 A, 284.
1923 A, 210.
Jordan and Evermann 1898 A, 186 (Anoplomatidæ).
Regan, C. T. 1913 A, 171, 173, 177 (Anoplomatidæ).

EOSCORPIUS Jordan and Gilbert. Type *E. primævus* Jord. and Gilbert.

Jordan and Gilbert 1919 A, 53.

Eoscorpius primævus Jordan and Gilbert.

Jordan and Gilbert 1919 A, 53, pl. xxx.

Jordan, D. S. 1921 A, 284.
Miocene (Monterey); California.

HEXAGRAMMIDÆ Gill.

Gill, T. 1889 A, 583, 587.
Arldt, T. 1923 A, 694 ("hexagrammiden").
Boulenger, G. A. 1904 A, 184.
1904 D, 694, 696.
Dean, Gudger, Henn 1923 A, 658.
Goodrich, E. S. 1909 A, 453.
Gutberlet, J. E. 1915 A, 27
Jordan, D. S. 1905 A, ii, 439.
1923 A, 211.
Jordan and Evermann 1898 A, 1863.
Jordan and Gilbert 1882 A, 640 (Chirinæ).
Meek, A. 1916 A, 347.
Regan, C. T. 1913 A, 171, 173, 177.

ZEMIAGRAMMUS Jordan. Type *Z. isistius* Jordan.

Jordan, D. S. 1921 A, 289.

Zemiagrammus isistius Jordan.

Jordan, D. S. 1921 A, 289, pl. x, fig. *a* (Zemiagrammus); pl. 1 (Zemmiagrammus).
1925 B, 35 (Syn.? of Aræosteus rothi).
Miocene (Monterey); California.

ACHRESTOGRAMMUS Jordan. Type *Hexagrammos achrestus* Jordan and Gilbert.

Jordan, D. S. 1921 A, 289.

Achrestogrammus achrestus (Jordan and Gilbert).

Jordan and Gilbert 1919 A, 52, pl. xxiv, fig. 2 Hexagrammos).

Jordan, D. S. 1921 A, 289.
1922 D, 274, fig. 8 (Hexagrammos).
Jordan and Gilbert 1920 A, 36, pl. xix (Hexagrammos).
Miocene (Monterey); California.

OPHIODONTIDÆ Jordan and Gilbert.

Jordan and Gilbert. J. Z. 1920 A, 36.
Jordan, D. S. 1921 A, 290.
1923 A, 211.

Jordan and Evermann 1898 A, 1864 (Ophiodontinæ).
Jordan and C. H. Gilbert 1882 A, 640 (Ophiodontinæ).

OPHIODON Girard. Type *O. elongatus* Girard.

Girard, C. . 1854, Proc. Acad. Nat. Sci. Phila., 133.
Boulenger, G. A. 1904 D, 692, 696, fig. 422.
Gill, T. 1885 C, 253.
Goodrich, E. S. 1909 A, 453.
Günther, A. C. 1860 A, 93.
Jordan, D. S. 1905 A, ii, 4.
1907 B, 651.
1921 A, 290.

Jordan and Evermann 1898 A, 1875.
Jordan and Gilbert 1882 A, 646.

Ophiodon ozymandias Jordan.

Jordan, D. S. 1921 A, 290.
Jordan and Gilbert 1920 A, 36 (Ozymandias gilberti; not of 1919).
Miocene (Monterey); California.

COTTOIDÆ, new form.

Hay, O. P. 1902 A, 406 (Cottoidea).
Gill, T. 1872 C, 6 (Cottoidea).
1873 F, 8 (Cottoidea, Cyclopteroidea).

Gill, T. 1890 A, 363 (Cottoidea).
Jordan, D. S. 1923 A, 211 (Cottiformes).
Regan, C. T. 1913 A, 171, 179 (Cottiformes).

COTTIDÆ Swainson.

Swainson, W. 1838 A, ii, 181, 270.
Hay, O. P. 1902 A, 406.
Abel, O. 1906 C, 83, 84.
Agassiz, L. 1844 D, 142 ("cottoides").
Allis, E. P. 1909 A, 213.
Arldt, T. 1907 D, 648.
1912 A, 760.
1923 A, 695 ("cottiden").
Berg, L. S. 1906 A, 906.
1907 A, 37.
Boulenger, G. A. 1904 D, 697.
Bridge, T. W. 1896 A, 571.
Cockerell, T. D. A. 1913 B, 171.
Cuvier, G. 1815 A, 110 ("cottes").
Dean, Gudger, Henn 1923 A, 374, 658.
Fitzinger, L. J. 1873 A, 40 (Cotti).
Gill, T. 1885 B, 34.
1885 C, 249.
1905 D, 348.
1908 A, 101 (Cottinæ).
Girard, C. F. 1851 A.
1852 A, 3 ("cottoïdes").
Goetsch, W. 1920 A, 481.
Goodrich, E. S. 1909 A, 103, 453, fig. 64.

Günther, A. C. 1881 A, 690.
Heilprin, A. 1887 A, 68.
Hubbs, C. L. 1926 A, 64 ("cottoids").
Jordan, D. S. 1905 A, ii, 441, 565.
1907 B, 652.
1923 A, 213.
Jordan and Evermann 1898 A, 1879.
Jordan and C. Gilbert 1882 A, 682.
Jordan and J. Z. Gilbert 1919 A, 54.
Klein, E. F. 1885 A, 166 (Cottina).
1886 A, 240, 274, 277 (Cottina).
Leunis and Ludwig 1883 A, 687.
Meek, A. 1916 A, 349, 350, 374.
Priem, F. 1914 B, 245, fig. 1 ("cottidarum").
Putnam, F. W. 1874 A, 337.
Regan, C. T. 1911 H, 731.
1913 A, 171, 173, 180.
Richardson, J. 1836 A, 36 (Cottoideæ).
Schlosser, M. 1917 A, 140, 143 ("cottiden").
Starks, E. C. 1911 A, 747.
Woodward, A. S. 1901 A, 580.
Zittel and Koken 1911 A, 140.
Zittel and Schlosser 1923 A, 144.

COTTUS Linn. Type *C. gobio* Linn.

Linnæus, C. 1758 A, 264.
Hay, O. P. 1902 A, 406.
Agassiz, A. 1877 A, 122.
Allis, E. P. 1905 A, 465, figs. 31-35.
1907 A, 570.
1909 A, 213, pl. iv.
1922 A, 153.
Arldt, T. 1923 A, 695.
Baudelot, E. 1873 A, 94.
Beer, G. R. 1924 C, 319, figs. 30, 31.
Belling, D. E. 1912 A, 55.
Berg, L. S. 1906 A, 909.
1907 A, 37.
Born, G. 1827 A, 188.
Bronn, H. G. 1848 A, 341.
1849 A, 680.
Carlsson, A. 1894 A, 217, 228.
Cuvier, G. 1805 A.
Dall and Harris 1892 A, 282.
Dean, Gudger, Henn 1923 A, 676.
Derjugin, K. 1909 A.
1910 A, 597.
Dietz, P. A. 1914 A, 135, figs. 21, 29.
1921 A, 443.
Fryd, C. 1901 A, 21.
Fulton, T. W. 1906 A, 55, pl. iii.
Gill, T. 1861 D, 40.
1908 A, 102, fig. 26.
Girard, C. F. 1851 A.
1851 B, 183.
1852 A, 3, 15.
Goetsch, W. 1920 A, 13, 15, 492, pls. i, ii.
Jordan, D. S. 1905 A, ii, 444, 565.
1907 B, 655.
Jordan and Evermann 1917 A, 12.
Jordan and Gilbert 1882 A, 700.
Klein, E. F. 1879 A, 86, 117.
1884 A, 208.
1885 A, 111, 201.
1886 A, 240, 274, 277.
Kner, R. 1861 A, 762.
Köstlin, O. 1844 A.
Leriche, M. 1905 B, 677.
Meek, A. 1916 A, 352.
Noorden, C. 1883 A, 235.
Owen, R. 1868 A, 874.
Ryder, J. 1887 A, 354.
Shann, E. W. 1919 A, 532, 560.
Stannius, H. 1842 C, 98.
1854 A, 66.
Stephan, P. 1900 A, 301.
Thilo, O. 1900 B, 20.
Totten, A. K. 1914 A, 252.
Woodward, A. S. 1901 A, 585.

Cottus beldingii Eigenmann and Eigenmann.

Eigenmann and Eigenmann 1891, Amer. Naturalist, xxv, 1132.
Hay, O. P. 1927 D, 152.
Jordan, D. S. 1924 A, 1, pl. i (C. beldingi).
Jordan and Evermann 1898 A, 1958.
Recent: Lakes Tahoe and Donner, California: Pleistocene (Lahontan); Nevada.

Cottus cryptotremus Cope.

Hay, O. P. 1902 A, 406.
1927 D, 245, 265, 268.
Leriche, M. 1905 B, 678.
Woodward, A. S. 1901 A, 585.
Pleistocene (Idaho); Idaho.

Cottus divaricatus Cope.

Hay, O. P. 1902 A, 406.
Dall and Harris 1892 A, 282.
Hay, O. P. 1927 D, 245.
Hussakof, L. 1908 A, 68, fig. 36*a*.
Leriche, M. 1905 B, 678.
Woodward, A. S. 1901 A, 585.
Pleistocene (Idaho); Oregon.

Cottus hypoceras Cope.

Hay, O. P. 1902 A, 406.
Dall and Harris 1892 A, 282.
Hay, O. P. 1927 D, 245.
Hussakof, L. 1908 A, 69, fig. 36*e*.
Leriche, M. 1905 B, 678.
Woodward, A. S. 1901 A, 585.
Pleistocene (Idaho); Oregon.

Cottus pontifex Cope.

Hay, O. P. 1902 A, 406.
Dall and Harris 1892 A, 282.
Hay, O. P. 1927 D, 245.
Hussakof, L. 1908 A, 69, fig. 36*d*.
Leriche, M. 1905 B, 678.
Woodward, A. S. 1901 A, 585.
Pleistocene (Idaho); Oregon.

HAYIA Jordan and Gilbert. Type *H. daulica* Jordan and Gilbert.

Jordan and Gilbert 1919 A, 55.
The family position of this genus is uncertain.

Hayia daulica Jordan and Gilbert.

Jordan and Gilbert 1919 A, 55, pl. xxiii, fig. 2.
Jordan, D. S. 1921 A, 290.
Miocene (Monterey); California.

ARTEDIELLUS Jordan. Type *Cottus uncinatus* Reinh.

Hay, O. P. 1902 A, 407.

Artediellus atlanticus Jord. and Evermann.

Hay, O. P. 1902 A, 407.
Ami, H. M. 1897 A, 22 (Cottus uncinatus).
Ami, H. M. 1901 C, 53 ("Cottus").
Coleman, A. P. 1901 C, 224 (Cottus uncinatus).
Dawson, J. W. 1857 A, 415 ("Cottus").
1863 F, 917 ("Cottus").
1894 C, 203, 265 (Cottus uncinatus).
Hay, O. P. 1923 A, 287.

Johnson, W. A. 1917 A, 25 ("Cottus").
Lambe, L. M. 1904 C, 39, 44 (A. uncinatus).
Leriche, M. 1905 B, 677 (Cottus uncinatus).
Meek, A. 1916 A, 354.
Woodward, A. S. 1901 A, 585 (Cottus uncinatus).
Recent; Labrador to Cape Cod: Pleistocene; Ontario.

URANIDEA DeKay. Type *U. quiescens* DeKay.

DeKay, J. A. 1842, New York Fauna, Fishes, 61.
Girard, C. 1851 A, 9.
Jordan, D. S. 1905 A, ii, 444.
Jordan and Evermann 1898 A, 1963.
Jordan and Gilbert 1882 A, 693.

Uranidea? sp. indet.

Dall, W. H. 1889, in Diller, J. S. 1889 A, 418 ("Uranidea." This genus?).
Turner, H. W. 1899 A, 563 (This genus?).
Neocene; California.

Suborder TRIGLIFORMES Jordan.

Jordan, D. S. 1923 A, 216.

CYCLOPTEROIDÆ, new form.

Hay, O. P. 1902 A, 407 (Cyclopteroidea).
Allis, E. P. 1909 A, 195 (Cyclopteroidea).
Gill, T. 1873 F, 8 (Cyclopteroidea).
1890 A, 361-370 (Cyclopteroidea).
Jordan, D. S. 1923 A, 215 (Cyclopteriformes).

CYCLOPTERIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 96.
Hay, O. P. 1902 A, 407.
Arldt, T. 1923 A, 695 ("cyclopteriden").
Bonaparte, C. L. 1838 B, 132.
Boulenger, G. A. 1904 D, 698, 737.
Bridge, T. W. 1896 A, 577.
Cuvier G. 1815 A, 110 ("cycloptères").
Dean, Gudger, Henn 1923 A, 658.
Dietz, P. A. 1914 A, 135.
1921 A, 456.
Fitzinger, L. J. 1873 A, 41 (Cyclopteri).
Gill, T. 1885 B, 34.
1885 C, 250.
1890 A, 366.
Goodrich, E. S. 1909 A, 454.
Guitel, F. 1896 A, 345 ("cycloptères").
Günther, A. C. 1881 A, 690 (Discoboli).
Jordan, D. S. 1905 A, ii, 453, 565.
1907 B, 664.
1923 A, 215.
Jordan and Gilbert 1882 A, 744.
Klein, E. F. 1884 A, 135, 201 (Discoboli).
Meek, A. 1916 A, 356.
Müller, J. 1846 C, 158 (Discoboli).
Putnam, F. W. 1874 A, 337.
Regan, C. T. 1913 A, 172, 173, 182.
Schmidt, B. 1913 A, 317 (Cyclopterinæ).
Shepherd, C. E. 1914 A, 271.
Stannius, H. 1854 A, 4, seq. (Cyclopteri).
Starks, E. C. 1911 A, 748 (Cyclopteryidæ).

CYCLOPTERUS Linn. Type *C. lumpus* Linn.

Hay, O. P. 1902 A, 407.
Allis, E. P. 1909 A, 195, 199.
Baudelot, E. 1873 A, 93.
Boulenger, G. A. 1904 D, 699, 737, fig. 425.
Braus, H. 1906 A, 173.
Cuvier, G. 1805 A.
Dean, Gudger, Henn 1923 A, 676.
Derjugin, K. M. 1909 A.
1910 A, 588.
Dietz, P. A. 1914 A, 137, figs. 25, 31.
1921 A, 435, figs. 4, 11.
Fiebiger, J. 1905 A, 142.
Gill, T. 1890 A, 361.
1907 B, 175.
Goetsch, W. 1920 A, 38, 500.
Goette, A. 1879 A, 126.
Goodrich, E. S. 1906 A, 347.
Guitel, F. 1896 A, 345.
Huxley, T. H. 1859 H, 38.
Jordan and Evermann 1917 A, 12.
Jordan and Gilbert 1882 A, 746.
Klaatsch, H. 1890 A, 175.
Klein, E. F. 1884 A, 135, 201, 216.
1885 A, 199, 204, 235.
1886 A, 281.
Kner, R. 1861 A, 767.
Köstlin, O. 1844 A.
Leunis and Ludwig 1883 A, 691.
Meckel, J. F. 1825 A.
Norman, E. W. 1926 A, 402, figs. 42, 50.
Owen, R. 1848 B, 68.
1866 A, 180.
Pehrson, T. 1922 A, 13, 20.
Putnam, F. W. 1874 A, 335.
Sagemehl, M. 1884 A, 4.
Schmidt, B. 1913 A, 313.
Stannius, H. 1854 A, 95.
Stephan, P. 1900 A, 385, 388.
Thilo, O. 1900 A, 19.
Uhlmann, E. 1921 A, 275.
Ussow, S. 1900 A, 185, pl. iv.
Wagner, R. 1843 A.
Wallace, A. R. 1876 A, ii, 430.

Cyclopterus lumpus Linn.

Hay, O. P. 1902 A, 407.
Ami, H. M. 1901 C, 54.
Billings, E. 1856 A, 337, 345 (Cyclopteris).
Bridge, T. W. 1896 A, 577.
Coleman, A. P. 1901 C, 224.
Dawson, J. W. 1857 A, 408, 415.
1863 F, 917.
1872 B, 403.
1872 C, 57, 99.
1894 C, 203.

Dietz, P. A. 1921 A, 438, figs. 1-3.
Fiebiger, J. 1905 A, 141.
Fulton, T. W. 1906 A, 59, pls. iii, B, v.
Gill, T. 1885 C, 251, fig. 142.
1890 A, 368.
1907 B, 175, figs. 32, 33, 36, 43-47.
Goetsch, W. 1920 A, 500.
Guitel, F. 1896 A, 345, pls. vi-x; text-figs. 1-8.
Hase, A. 1911 A, 217.
Haug, E. 1911 A, 1876.
Hay, O. P. 1923 A, 23, 287.
Jordan, D. S. 1905 A, ii, 453.
1907 B, 664.
Jordan and Gilbert 1882 A, 747.
Lambe, L. M. 1904 C, 39, 44.
Meek, A. 1916 A, 356, 357, 358.
Rathke, H., 1822 A, 498, pl. vi.
Richardson, J. 1836 A, 260.
Schmidt, B. 1913 A, 313.
Shepherd, C. E. 1914 A, 271, fig. 3.
Stromer, E. 1925 B, 363.
Uhlmann, E. 1921 A, 275, pls. xvi, xvii; text-figs. 1-45.
Recent; North Atlantic, both coasts: Pleistocene (Leda clay); Ontario.

TRIGLOIDÆ Kaup.

Kaup, J. J. 1873 A, 79 (as suborder).
Gill, T. 1889 A, 589 (Craniomi).
Jordan, D. S. 1905 A, ii, 456 (Craniomi).
1923 A, 216 (Trigliformes).

TRIGLIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 90, 102.
Allis, E. P. 1909 A, 17, 113.
Bassoli, G. G. 1906 A, 53, pl. ii (otoliths).
Baudelot, E. 1873 A, 94 (Trigla).
Bonaparte, C. L. 1838 B, 132.
Boulenger, G. A. 1904 D, 700.
Cockerell, T. D. A. 1913 B, 171.
Dean, Gudger, Henn 1923 A, 705.
Eudes-Deslongchamps, E. 1842 D, 45, pl. v ("trigles").
Fitzinger, L. J. 1873 A, 40 (Triglæ).
Geoffroy-St. Hilaire, E. F. 1824 A, 137 ("trigles").
Gill, T. 1872 C, 6.
1885 C, 252.
1889 A, 568, 590.
Goetsch, W. 1920 A, 481 ("trigladen").
Goode and Bean 1895 A, 462.
Goodrich, E. S. 1909 A, 450, 517.
Günther, A. C. 1860 A, 87.
Hamburger, R. 1904 A, 83 (Trigla).
Hertwig, O. 1881 A, 19.
Jordan, D. S. 1905 A, ii, 456.
1923 A, 27.
Jordan and Evermann 1898 A, 2147.
Jordan and Gilbert 1882 A, 731.
Kaup, J. J. 1873 A, 71.
Kesteven, H. L. 1926 B, 231.
Klein, E. F. 1884 A, 135, 181, 208.
1885 A, 111, 134, 166, 201.
1886 A, 209, 240, 277.
Kner, R. 1862 A, 57 ("trigloiden").
Meek, A. 1916 A, 362.
Owen, R. 1866 A, 101, fig. 82 (Trigla).
Sauvage, H. E. 1873 A, 723.
Schubert, R. J. 1906 A, 641 (Cataphracti).
Shepherd, C. E. 1912 A, 453.
Siebenrock, F. 1901 A, 106.
Stephan, P. 1900 A, 291 ("triglidés").
Supino, F. 1904 A, 629.
Terra, P. 1911 A, 218.
Wallace, A. R. 1876 A, ii, 427.
Weiler, W. 1922 A, 77 (otoliths).
Williamson, C. 1894 A, 322.
Woodward, A. S. 1901 A, 585.
Zittel and Koken 1911 A, 140.
Zittel and Schlosser 1923 A, 143.

TRIGLA Linnæus. Type *T. lyra* Linnæus.

Linnæus, C. 1758 A, 300.
Allis, E. P. 1909 A, 215, pl. v.
Bassoli, G. G. 1906 A, 53, pl. ii (otoliths).
Beer, G. R. 1926 A, 339, figs. 107, 114.
Belling, D. E. 1912 A, 46.
Boulenger, G. A. 1904 D, 701.
Bridge, T. W. 1896 A, 571.
Dean, Gudger, Henn 1923 A, 705.
Dietz, P. A. 1914 A, 135, figs. 22, 27.
Fryd, C. 1901 A, 22, fig.
Fulton, T. W. 1906 A, 55, pl. i, B.
Goetsch, W. 1920 A, 488, pl. xxii.
Goode and Bean 1895 A, 463.
Goodrich, E. S. 1909 A, 450, 517.
Hamburger, R. 1904 A, 88, 120, pl. ii.
Jordan, D. S. 1905 A, ii, 456.
Jordan and Evermann 1898 A, 2176.
Kindred, J. E. 1919 A, 57.
Kingsley, J. S. 1925A, 113, 237, figs. 119, 250
Klein, E. F. 1884 A, 183, 199, 251, pl. ii.
1885 A.
Köstlin, O. 1844 A.
Kolzoff, N. K. 1896 A, 516, fig. 4.
Leunis and Ludwig 1883 A, 688.
Pouchet, G. 1878 A, 141 ("trigle").
Shann, E. W. 1919 A, 532.
Stannius, H. 1849 A, 536.
1854 A, 67, 93.
Thilo, O. 1896 B, 97.
Weiler, W. 1922 A, 77, pl. i (otoliths).
Whitehouse, R. H. 1910 C, 139, fig. 3.
Williamson, C. 1894 A, 322, pls. xiii-xv.
Woodward, A. S. 1901 A, 586.

Trigla? sp. indet.

Dana, J. D. 1849 A, 722, pl. xvi (This genus?).
Quaternary; Oregon.
Sauvage, H. E. 1873 A, 723.

Order EMBIOTOCOMORPHI, new name.

Jordan, D. S. 1923 A, 217 (Holconoti).

EMBIOTOCIDÆ Günther.

Günther, A. C. 1862 A, 244.
Agassiz, L. 1853 B, 383 (Embiotocoidæ).
Cockerell, T. D. A. 1913 B, 164, pl. xxxviii, figs. 37, 38.
Eigenmann, C. H. 1894 A, 381-478, with 24 pls.
Frost, G. A. 1928 A, 452, pl. xvii (Embiotoca).
Jordan, D. S. 1923 A, 217.
Jordan and Evermann 1898 A, 1493.
Jordan and Gilbert 1882 A, 585.

LIROSCELES Jordan. Type *L. elegans* Jordan.

Jordan, D. S. 1925 B, 32, pl. xvi.

Lirosceles elegans Jordan.

Jordan, D. S. 1925 B, 32, pl. xvi.
Miocene (Monterey); California.

ERISCELES Jordan. Type *E. pristinus* Jordan.

Jordan, D. S. 1925 B, 33.

Erisceles pristinus Jordan.

Jordan, D. S. 1925 B, 33, pl. xvii.
Miocene (Monterey); California.

DASCELES Jordan. Type *D. dassurus* Jordan.

Jordan, D. S. 1925 B, 34.

Dasceles dassurus Jordan.

Jordan, D. S. 1925 B, 34, pl. xviii.
Miocene (Monterey); California.

Order GOBIESOCOMORPHI, new name.

Boulenger, G. A. 1904 D, 708 (Xenoptera).
Gill, T. 1872 C, 13 (Gobiesociformes).
1885 C, 267 (Xenopterygii).
Jordan, D. S. 1905 A, ii, 529 (Xenopterygii).
1907 B, 737 (Xenopterygii).
1921 A, 291 (Xenopterygii).
Jordan, D. S. 1923 A, 228 (Xenopterygia).
Jordan and Evermann 1898 A, 2326 (Xenopterygii).
Regan, C. T. 1909 B, 86 (Xenopteri).
1913 B, 111 (Xenopterygii).

GOBIESOCIDÆ Günther.

Günther, A. C. 1861 A, 489.
Allis, E. P. 1909 A, 214.
Arldt, T. 1907 D, 656.
Boulenger, G. A. 1904 D, 707.
Cope, E. D. 1871 T, 459.
Dean, Gudger, Henn 1923 A, 659.
Gill, T. 1872 C, 5.
1885 C, 267.
Goodrich, E. S. 1909 A, 456.
Jordan, D. S. 1923 A, 238.
Jordan and Evermann 1898 A, 2326.
Jordan and Gilbert 1882 A, 747.

BULBICEPS Jordan. Type *B. raninus* Jordan.

Jordan, D. S. 1919 A, 12.
Hubbs, C. L. 1924 A, 178.

Bulbiceps raninus Jordan.

Jordan, D. S. 1919 A, 5, 12, pl. vi.
1921 A, 291.
Miocene? (Soledad); California.

Order DIODONTOMORPHI, new name.

This order is usually called Plectognathi or Plectognatha by the authors cited.
Hay, O. P. 1902 A, 407.
Abel, O. 1919 A, 157.
Arldt, T. 1907 D, 674.
1923 A, 700 ("plectognathen").
Bonaparte, C. L. 1831 A, 97.
1833 B, 1202.
Boulenger, G. A. 1901 D, 500.
1904 A, 162, 189.
1904 D, 721, 751.
Bridge, T. W. 1896 A, 578.
Bronn, H. G. 1849 A, 780, seq.
Carus, V. 1875 A, 582.
Cope, E. D. 1871 T, 456.
Cunningham, J. T. 1912 A, 248, 271.
Dean, Gudger, Henn 1923 A, 695.
Dietz, P. A. 1917 A, 86.
Eastman, C. R. 1911 C, 390.
Eichwald, E. 1832 A, 887 ("plectognathen").
Eimer, G. H. T. 1901 A, 61, 107.
Fitzinger, L. J. 1873 A, 46.
Goetsch, W. 1920 A, 19, 39, 450 ("plectognathen").
Goodrich, E. S. 1909 A, 435.
Gill, T. 1885 C, 286.
1905 A, 659, 660.
Greene, J. R. 1861 A, 228.

Günther, A. C. 1881 A, 688, 694.
Heckel, J. 1850 B, 146 ("plectognathen").
Hoernes, R. 1886 A, 527.
Hoeven, J. 1822 A.
Hollard, H. 1864 B, 248 ("plectognathes").
Huxley, T. H. 1859 H, 37.
1863 F, 427.
Jaekel, O. 1911 A, 98.
1919 A, 109.
Jordan, D. S. 1905 A, ii, 411, 586.
1907 B, 622, 768.
1923 A, 239.
Jordan and Gilbert 1882 A, 852.
Klaatsch, H. 1890 A, 175 ("plectognathen").
Klein, E. F. 1879 A, 66, 72.
1881 A, 349.
1884 A, 150, 190, 236, 251.
1885 A, 129, 158, 218, 252.
1886 A, 230, 269, 296.
Kner, R. 1860 B, 822.
Köstlin, O. 1844 A ("plectognathen").
Latreille, P. A. 1825 A, 114.
Leunis and Ludwig 1883 A, 763.
Lönnberg, E. 1901 A.
1902 A.
Meek, A. 1916 A, 336.
Parker and Haswell 1897 A, 207.
Rauther, M. 1913 A, 1104.
Regan, C. T. 1902 A, 281.
1903 A, 285.
1909 B, 81, 86.
1912 B, 843, 852.
1913 B, 111.
Rosén, N. 1913 A, 1 ("plectognaths").
1913 B, 1.
1916 B, 1 ("plectognaths").
Sagemehl, M. 1884 A, 100 ("plectognathiden").
Schlosser, M. 1917 A, 142 ("gymnodonten").
Schmalhausen, J. J. 1916 C, 212.
Siebenrock, F. 1901 A, 107.
Stannius, H. 1854 A, 6, seq.
Starks, E. C. 1916 A, 32.
Stephan, P. 1898 A, 358 ("plectognathes").
1900 A, 314.
Terra, P. 1911 A, 207.
Tretjakoff, D. 1925 A, 379 ("plectognathen").
1926 A, 619 ("plectognathen").
Wallace, A. R. 1876 A, ii, 457.
Whitehouse, R. H. 1910 B, 620.
Woodward, A. S. 1898 B, 122.
Zittel and Koken 1911 A, 142.
Zittel and Schlosser 1923 A, 140.
Zittel and Woodward 1902 A, 109.

Suborder BALISTIFORMES, new name.

Unless otherwise indicated the authors, as cited, use the name Sclerodermi.
Hay, O. P. 1902 A, 407.
Abel, O. 1912 F, 199.
Agassiz, L. 1835 B, 331 (Sclerodermes).
1835 H, 231 (Sclerodermata).
1844 D, 142 (Sclerodermes).
1845 C, 325 (Sclerodermata).
Arldt, T. 1923 A, 700 ("sclerodermen").
Baraldi, G. 1877 A, 44.
Bonaparte, C. L. 1831 A, 97, 120.
Boulenger, G. A. 1904 D, 722.
Bridge, T. W. 1896 A, 578.
Bronn, H. G. 1848 B, 1124 (Sclerodermes).
Carus, V. 1875 A, 583.
Cockerell, T. D. A. 1913 B, 168.
Cunningham, J. T. 1912 A, 271.
Cuvier, G. 1814 A, 76 ("sclerodermes").
Dean, Gudger, Henn 1923 A, 402, 661, 662.
Duméril, A. 1856 A, 173 ("sclerodermes").
Fitzinger, L. J. 1873 A, 46 (Sclerodermata).
Giebel, C. G. 1855 A, 110.
Gill, T. 1873 F, 6 (Balistoidea).
1885 C, 287.
1888 B, 830 ("scleroderms").
Goetsch, W. 1920 A, 31 ("sclerodermen").
Goodrich, E. S. 1909 A, 436.
Günther, A. 1881 A, 694.
Hoernes, R. 1886 A, 527.
Jordan, D. S. 1905 A, ii, 412, 591.
1907 B, 622, 768.
1923 A, 239.
Klaatsch, H. 1890 A, 175, 187 ("sclerodermen")
Köstlin, O. 1844 A ("sclerodermen").
Latreille, P. A. 1825 A, 115 (Scleroderma).
Leunis and Ludwig 1883 A, 763.
Lönnberg, E. 1901 A.
1902 A.
Meek, A. 1916 A, 336.
Rauther, M. 1913 A, 1104.
Regan, C. T. 1903 A, 286.
1909 B, 81 (Balistoidei).
1912 B, 852.
Rosén, N. 1913 A, 19.
Schlosser, M. 1917 A, 142.
Siebenrock, F. 1901 A, 107.
Steinmann, G. 1927 A, 22 ("sclerodermen").
Wallace, A. R. 1876 A, II, 457.
Whitehouse, R. H. 1910 B, 620, pl. l. fig. 33.
Zittel and Koken 1911 A, 142 (Sclerodermidæ).
Zittel and Schlosser 1923 A, 140.
Zittel and Woodward 1902 A, 110 (Sclerodermidæ).

BALISTIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 97, 120.
Hay, O. P. 1902 A, 407.
Abel, O. 1922 F, 78.
Baudelot, E. 1873 A, 112 ("balistes").
Boulenger, G. A. 1904 A, 189.
1904 D, 723, 732.
Cockerell, T. D. A. 1913 B, 168.
Cope, E. D. 1871 T, 458.
Cuvier, G. 1805 A ("balistes").
Cuvier, G. 1815 A, 120 ("balistes").
Dareste, C. 1872 A, 1527 ("balistes").
1872 B, 68.
Dean, Gudger, Henn 1923 A, 670.
Dietz, P. A. 1914 A, 158, fig. 45 (Balistes).
Duméril, A. 1856 A, 173 ("balistides").
Fitzinger, L. J. 1873 A, 47 (Balistæ).
Geoffroy St. Hilaire, E. F. 1807 B, 423 ("balistes").

Gill, T. 1885 B, 35.
1885 C, 287.
1888 B, 828.
Goetsch, W. 1920 A, 34, 449, pl. i (Balistes)
Goodrich, E. S. 1909 A, 437.
Hamburger, R. 1904 A, 80 (Balistes).
Jordan, D. S. 1905 A, ii, 412, 558.
1907 B, 623.
1923 A, 239.
Jordan and Gilbert 1882 A, 854.
Klein, E. F. 1881 A, 330, 349 (Balistina).
1884 A (Balistina).
1885 A (Balistina).
1886 A (Balistina).
Köstlin, O. 1844 A (Balistes).
Leriche, M. 1906 C, 273.
Lönnberg, E. 1902 A (Balistini).
Mayer, A. F. 1862 A, 109 (Balistes).
Meckel, J. F. 1825 A ("ballisten").
Meek, A. 1916 A, 336.
Müller, J. 1845 A, 102, 137 (Balistini).
Owen, R. 1845 B, 82, pl. xl (Balistes).
1866 A, 197 (Balistes).
Rauther, M. 1919 A, 214, 4 figs.
Regan, C. T. 1903 A, 288.
Rosén, N. 1913 B, 1, text-fig. G (Balistes).
1916 B, 3, 12.
Sagemehl, M. 1884 A, 4 (Balistes).
Shepherd, C. E. 1913 A, 388.
Steinmann, G. 1927 A, 19, pl. i; text-figs. 7-9 (Balisti).
Stephan, P. 1900 A, 379, 402 ("balistidés").
Thilo, O. 1896 A, 291, pls. vi, vii ("balisten").
1898 B, 89 ("balistiden").
Tretjakoff, D. 1925 A, 381, 386 (Balistes).
1926 A, 619, figs. 1, 2 (Balistes).
Wagner, R. 1843 A (Balistes).
Williamson, W. C. 1851 A, 657, pl. xxviii, fig. 13.
Woodward, A. S. 1901 A, 565.

Grypodon Hay. Type *Ancistrodon texanus* Dames.

Hay, O. P. 1902 A, 408.
Arldt, T. 1923 A, 700 (Ancistrodon).
Jordan, D. S. 1920 C, 486.
Leriche, M. 1905 A, 168 (Ancistrodon).
1906 C, 263, 411 (Ancistrodon).
1911 A, 164 (Ancistrodon).
Priem, F. 1907 B, 415 (Ancistrodon).
Priem, F. 1908 B, 60, 64, 98, fig. 26 (Ancistrodon).
1912 B, 271 (Ancistrodon).
Stromer, E. 1905 C, 187 (Ancistrodon).

Grypodon texanus (Dames).

Hay, O. P. 1902 A, 408.
Cretaceous; Texas.

Suborder Diodontiformes, new name.

Unless otherwise indicated the authors, as cited use the name Gymnodontes.
Hay, O. P. 1902 A, 408 (Diodontoidea).
Abel, O. 1912 F, 199.
Agassiz, L. 1833 A, 480 (Gymnodontæ).
1835 B, 331.
1835 H, 231 (Gymnodontæ).
1844 D, 142.
1845 C, 325 ("gymnodonts").
Arldt, T. 1907 D, 656 (Gymnodontidæ).
1923 A, 700 ("gymnodonten").
Bonaparte, C. L. 1831 A, 97, 120.
1833 B, 1202.
1838 B, 131.
1840 A, 47.
Born, G. 1827 A, 185 ("gymnodonten").
Boulenger, G. A. 1901 D, 501.
1904 D, 725, 741.
Bridge, T. W. 1896 A, 581.
Cunningham, J. T. 1912 A, 272.
Dean, Gudger, Henn 1923 A, 662.
Duméril, A. 1856 A, 157 ("gymnognathes").
Eastman, C. R. 1911 C, 390.
Fitzinger, L. J. 1873 A, 47.
Giebel, C. G. 1855 A, 110.
Gill, T. 1885 C, 289.
Goetsch, W. 1920 A, 19 ("gymnodonten").
Goodrich, E. S. 1909 A, 439.
Günther, A. 1881 A, 694.
Hoernes, R. 1886 A, 527.
Jaeckel, O. 1911 A, 99.
Jordan, D. S. 1905 A, ii, 418, 573.
1907 B, 629, 768.
Jordan, D. S. 1923 A, 240.
Jordan and Evermann 1898 A, 1726.
Klaatsch, H. 1890 A, 175 ("gymnodonten").
Klein, E. F. 1879 A, 72.
1885 A, 255.
1886 A, 231.
Kner, R. 1860 B, 824 ("gymnodonten").
Köstlin, O. 1844 A ("gymnodonten").
Latreille, P. A. 1825 A, 115 (Gymnodonta).
Leunis and Ludwig 1883 A, 765.
Lönnberg, E. 1901 A.
1902 A.
Müller, J. 1845 A, 102, 137.
Owen, R. 1839 H, 347 ("gymnodontes").
1840 H, 74 ("gymnodontes").
1845 B, 77 ("gymnodonts").
Rauther, M. 1913 A, 1104.
Regan, C. T. 1903 A, 286, 291.
1912 B, 852 (Tetrodontoidei).
Rosén, N. 1913 A, 19.
Semon, R. 1901 B, 133 ("gymnodonten").
Siebenrock, F. 1901 A, 107.
Stannius, H. 1854 A, 94 (Gymnodontes).
Thilo, O. 1896 A, 333 ("gymnodonten").
Tomes, C. S. 1878 A, 41 ("gymnodonts").
Tretjakoff, D. 1926 A, 619 (Gymnodontes).
Wallace, A. R. 1876 A, ii, 457.
Zittel and Koken 1911 A, 142 (Gymnodontidæ).
Zittel and Schlosser 1923 A, 141 (Gymnodontidæ).
Zittel and Woodward 1902 A, 110 (Gymnodontidæ).

DIODONTIDÆ Richardson.

Richardson, J. 1856 A, 314.
Hay, O. P. 1902 A, 408.
Boulenger, G. A. 1904 D, 726.
Cope, E. D. 1871 T, 438.
Cunningham, J. T. 1912 A, 248.
Cuvier, G. 1801 A, 25 ("diodons").
1803 A, 166 ("diodons").
1815 A, 120 ("diodons").
Dean, Gudger, Henn 1923 A, 402, 662.
Eastman, C. R. 1911 C, 390.
Fitzinger, L. J. 1873 A, 48 (Diodontes).
Gill, T. 1885 B, 35.
1885 C, 290.
Goodrich, E. S. 1909 A, 440.
Jordan, D. S. 1905 A, ii, 422.
1907 B, 633.
1923 A, 241.
Jordan and Gilbert 1882 A, 859 (Diodontinæ).
Meek, A. 1916 A, 337.
Owen, R. 1866 A (Diodon).
Regan, C. T. 1903 A, 292.
1912 B, 852.
Rosén, N. 1913 A, 19.
1913 B, 24.
1916 B, 10, 20.
Shufeldt, R. W. 1917 A, 1.
Woodward, A. S. 1901 A, 570 (Gymnodontidæ).

DIODON Linn. Type *D. hystrix* Linn.

Hay, O. P. 1902 A, 408.
Abel, O. 1908 E, 415 (Cheirodus).
Agassiz, L. 1835 H, 231.
Allis, E. P. 1909 A, 63.
Arldt, T. 1923 A, 700.
Baudelot, E. 1873 A, 94.
Boulenger, G. A. 1904 D, 726, 738.
Bridge, T. W. 1896 A, 582, pl. xxiii.
Dean, Gudger, Henn 1923 A, 677.
Duméril, A. 1856 A, 159.
Eimer, G. H. T. 1901 A, 41, 61.
Goetsch, W. 1920 A, 25, pl. i.
Goette, A. 1879 A, 127.
Goodrich, E. S. 1909 A, 440, 442, figs. 452-455.
Hyrtl, C. J. 1862 A, 106.
Jordan, D. S. 1905 A, ii, 423, 566.
Jordan and Evermann 1917 A, 15.
Jordan and Gilbert 1882 A, 862.
Klein, E. F. 1884 A, 132, 135, 240, 242, 249, pl. iii.
1885 A, 220.
1886 A, 272, 296, 299, fig. 18.
Kner, R. 1860 B, 824.
Köstlin, O. 1844 A.
Leriche, M. 1905 A, 212.
1906 C, 414.
Leunis and Ludwig 1883 A, 766.
Meckel, J. F. 1825 A.
Meek, A. 1916 A, 337, 339.
Owen, R. 1840 H, 74.
1848 B, 113.
Owen, R. 1868 A, 877.
Pasquale, M. 1905 A, 71.
Regan, C. T. 1903 A, 291, fig. 57.
Ridewood, W. G. 1896 A, 387, 390.
Rosén, N. 1913 B, 24.
Schlosser, M. 1917 A, 144.
Shufeldt, R. W. 1917 A, 1.
Stannius, H. 1849 A, 539.
1854 A, 6, seq.
Stephan, P. 1900 A, 387.
Thilo, O. 1896 B, 104.
Tretjakoff, D. 1925 A, 381.
1926 A, 639, fig. 10.
Woodward, A. S. 1901 A, 571.
1922 C, 105, fig. 117.

Diodon vetus Leidy.

Hay, O. P. 1902 A, 408.
Pasquale, M. 1905 A, 71, figs. 1-3.
Woodward, A. S. 1901 A, 573.
Phosphate beds; South Carolina: Miocene; North Carolina: Pleistocene?; Florida (Cat. No. 4110. Wagner Free Inst., from Peace Creek, Florida).

Diodon sp. indet.

Hay, O. P. 1923 A, 381. Pleistocene (Early); Florida.
Tuomey, M. 1848 A, 159, 160. Eocene (Santee beds); South Carolina.

ZAPRORIDÆ Jordan.

Jordan, D. S. 1896, Proc. Calif. Acad. Sci., vi, 202.
1923 A, 230.
Jordan and Evermann 1898 A, 2848.
Jordan and Gilbert 1920 A, 25.
A family of uncertain position.

ARÆOSTEUS Jordan and Gilbert. Type *Arœosteus rothi* Jordan and Gilbert.

Jordan and Gilbert 1920 A, 25.

Arœosteus rothi Jordan and Gilbert.

Jordan and Gilbert 1920 A, 25, pl. xiv.
Jordan, D. S. 1921 A, 291, pl. xlix, fig. *b*.
1925 B, 35 (Zemiagrammus isistius a syn.?)
Miocene (Monterey); California.

OTOLITHS.

Hay, O. P. 1902 A, 408.
Bassoli, G. G. 1906 A, 36, pls. i, ii ("otoliti").
Eastman, C. R. 1901 B, 113 ("otolites").
Frost, G. A. 1925 A, 152, 553.
Frost, G. A. 1926 A, 465.
1927 A, 298.
1928 A, 451.
1928 B, 328.

Fryd, C. 1901 A, 7 (Otolithes).
Ihring, H. 1891 C, 23 (Otholithi).
Posthumus, O. 1923 A, 231.
Priem, F. 1908 B ("otolithes").
1914 B, 244-278, figs.
Schubert, R. J. 1902 A (Otolithes).
1905 A, 613 (Otolithes).
Shepherd, C. E. 1910 B.
1916 A.
Woodward, A. S. 1901 A, 629.

Class AMPHIBIA Linnæus.

Linnæus, C. 1858 A, i, 194.
Hay, O. P. 1902 A, 409 (Batrachia).
Abel, O. 1910 B, 185 ("amphibien").
1912 F, 300, 414.
1919 A, 220.
1920 A, 345.
1921 A, 143, 247 ("amphibien").
Adams, C. C. 1902 A, 116.
Adams, L. A. 1919 A, 83, 139, 144.
Adloff, P. 1904 B, 54 ("amphibien").
1907 A, 531 ("amphibien").
1910 B, 241 ("amphibien").
Adolphi, H. 1896 A, 115 ("amphibien").
Agar, W. E. 1907 A, 625.
Allis, E. P. 1898 A, 457.
1907 A, 570 ("amphibien").
1913 A, 324.
1915 A.
1918 A, 244.
1919 B, 80.
1923 A, 48.
1923 B, 132.
Altmann, F. 1925 A, 88 ("amphibien").
Anderson, R. J. 1912 A, 917.
1912 D, 250.
Anonymous, 1912 A, 519.
Anthony, R. 1912 A ("batraciens").
Anthony and Vallois 1914 A, 218 ("batraciens").
Arldt, T. 1907 C, 678 ("amphibien").
1907 D, 637.
1907 E, 204 ("amphibien").
1909 B, 354 ("amphibien").
1916 A, 94 ("lurche").
Arthaber, G. 1910 A, 552 ("amphibien").
Ayers, H. 1906 A, 77.
Baird, S. F. 1876 A, cc, 308 ("batrachia").
Baraldi, G. *passim* ("amfibi").
Bardeleben, K. 1896 A, 114 ("amphibier").
1901 A ("amphibien").
1903 A, 23 ("amphibien").
1906 A, 140 ("amphibien").
1907 A, 35 ("amphibien").
1907 B, 154 ("amphibien").
Bardenfleth, K. S. 1913 A, 69 ("amphibians").
Barrell, J. 1915 B, 391, 409 ("amphibians").
Baur, G. 1887 H, 47 ("amphibien").
1893 D, 116 ("amphibien").
1897 D, 42.
1897 E, 170.
1897 F, 372.
Beede, J. W. 1922 A, 680.
Beer, G. R. 1926 A, 307.
Bender, O. 1907 A, 38 ("amphibien").
1910 A, 123 ("amphibien").
1913 A, 285 ("amphibien").
Bergmann, C. 1841 A, 204 ("amphibien").
Beyer, H. 1907 A, 265, 267 ("amphibien").
1909 A, 32 ("amphibien").
Bischoff, T. L. W. 1840 B, 144 ("amphibies").
Blainville, H. M. D. 1835 A, 272.
Boas, J. E. V. 1914 B, 548, 550 ("amphibien").
1914 C, 239 ("amphibien").
Bogoljubsky, S. 1914 A, 659.
Böker, H. 1927 A, 21, 50, fig. 13 ("uramphib").
Bolk, L. 1913 A, 113 ("amphibien").
Bonaparte, C. L. 1832 A, 318.
1833 B, 1186 (Amphibia=Reptilia+Batrachia).
Boulenger, G. A. 1901 B, 401.
1902 F, 381.
1917 C, 458 ("batraciens").
Brandt, J. F. 1865 A, 220.
Branson, E. B. 1918 A, 90 ("amphibians").
Brauns, D. 1890 A, 147, 148 ("amphibien").
Braus, H. 1906 A, ("amphibien").
1906 B, 549 ("amphibien").
Bridge, T. W. 1878 A, 721, 724.
Broili, F. 1904 A, 107 ("amphibien").
Bronn, H. G. 1849 A, 780, seq. (Batrachii).
Broom, R. 1890 A, 410 ("amphibians").
1899 A, 749 ("amphibians").
1903 I, 554.
1904 B, 94.
1908 A, 1047.
1908 E, 114 ("amphibians").
1909 B, 165.
1911 A, 920 (Batrachia).
1912 A, 625 ("amphibien").
1926 A, 257 ("amphibians").
Bruch, C. 1862 A, 77 ("batrachien").
Burckhardt, R. 1903 A, 78 ("amphibien").
1906 A, 159 ("sauropsiden").
Cahall, W. C. 1890 A, 232 ("amphibians").
Carter, J. T. 1905 A, 129.
Cartier, O. 1875 A, 73 ("amphibien").
Carus, V. 1875 A, 454.
Carus and Engelmann 1861 A, 1052-1065, 1562. 1673, 1703.
Case, E. C. 1905 E, 180 ("amphibiens").
1907 E, 157.
1911 B, 85.
1912 A, 200.
1915 A, 96.
1924 B, 6.
Chaine, J. 1918 A, 734 ("batraciens").
Cleland, J. 1887 A, 392.
Cope, E. D. 1885 BB, 65 (Batrachia).
1885 DD, 303 (Batrachia).
1885 EE, 612 ("batrachians").
1891 N, 7, 28 (Batrachia).
Coyle, R. F. 1909 A, 582.
Cunningham, J. T. 1897 A, 485.
Cunningham and Boulenger 1912 A, 157-230.
Cuvier, G. 1803 A, 168 ("batrachiens").
1815 A, 106 ("batrachiens").
1825 A, v, 2, 386-444, pls. xxiv-xxvii.
Dabelow, A. 1926 A, 95 ("sauropsiden").
Dana, J. D. 1863 B, 315 ("amphibians").

Dana, J. D. 1863 C, 343 ("amphibians").
1863 D, 130 ("batrachians").
Davidoff, M. 1879 A, 506 ("amphibien").
Davidson, A. 1895 A, 407.
Day, H. 1915 A, 427.
Delsman, H. C. 1913 A, 659 ("amphibien").
1924 A, 155 ("amphibians").
Dendy, A. 1907 A, 292 ("amphibien").
Deninger, K. 1914 A, 186-214 ("amphibien").
1915 A, 183-186 ("amphibien").
Dependorf, T. 1907 A, 545 ("amphibien").
Depéret, C. 1907 B ("amphibiens").
Diener, C. 1909 A, 32 ("amphibien").
Döderlein, L. 1902 A, 399 ("amphibien").
Dollo, L. 1883 G, 582.
1884 D, 86.
1885 C, 302 ("batrachiens").
1889 E, 146 ("batrachiens").
Dombrowski, B. A. 1925 A, 69 ("amphibien").
Drüner, L. 1902 A, 439 ("amphibien").
1904 A, 266 ("amphibien").
Du Toit, P. J. 1913 A, 244 ("amphibien").
Dunn, E. R. 1923 A, 129.
Eastman, C. R. 1912 C, 657.
1913 B, 677.
1914 B, 688 ("amphibians").
1916 A, 655 ("amphibians").
1917 B, 655 ("amphibians").
Edgeworth, F. H. 1920 A, 125.
1925 A, 225.
Eggeling, H. 1906 A, 105 ("amphibien").
Eimer, G. H. T. 1901 A, 256 ("amphibien").
Eisler, P. 1895 A ("amphibien").
Elliot, A. I. M. 1907 A, 648.
Emery, C. 1895 A, 218 ("amphibiens").
1901 A, 673 ("amphibien").
Erdl, M. 1843 A, 507 ("amphibien").
Fejérváry, G. J. 1921 C, 11 ("amphibien").
1925 A, 184 ("amphibien").
Field, H. H. 1895 A, 340 ("amphibien").
Foote, J. S. 1913 A ("amphibians").
1916 A, 18 ("amphibians").
Forster, A. 1905 A, 89-138.
Frassetto, F. 1915 A ("amfibi").
Freund, L. 1902 A.
Fuchs, H. 1906 A, 49 ("amphibien").
1907 A, 150 ("amphibien").
1909 B, 122.
1909 D, 61 ("amphibien").
1910 A, 39 ("amphibien").
1910 C, 480 ("amphibien").
1911 A, 33 ("amphibien").
1912 B, 105 ("amphibien").
1913 A, 62 ("amphibien").
1914 A, 32 ("amphibien").
1920 C, 93 ("amphibien").
1926 A, 119.
1926 B, 1-34.
Fürbringer, M. 1902 A, 192 ("amphibien").
1904 A ("amphibien").
1904 B, 503 ("amphibien").
Gadow, H. 1901 A, 397.
1901 B, 3.
1902 B, 345.
1913 A, 95.
1914 A, 506, 508.
Gaskell, W. H. 1898 A, 553.
Gaskell, W. H. 1905 A, 41 ("amphibians").
1910 A, 11 ("amphibians").
Gaupp, E. 1891 B, 110 ("amphibien").
1895 A, 57, seq. ("amphibien").
1897 A, 543 ("amphibien").
1898 B ("amphibien").
1899 A, 1004, 1058, 1061 ("amphibien").
1900 A ("amphibien").
1901 B, 943 ("amphibien").
1902 A, 167 ("amphibien").
1905 A, 277 ("amphibien").
1905 C, 130 ("amphibien").
1905 D, 931 ("amphibien").
1905 E, 160 ("amphibien").
1906 A, 32 ("amphibien").
1906 B, ("amphibien").
1908 C, ("amphibien").
1910 B, 355, 370 ("amphibien").
1910 C, 425 ("amphibien").
1910 D, 87 ("amphibien").
1911 A, 418 ("amphibien").
1911 B, 98, 113 ("amphibien").
1911 C, 436 ("amphibien").
1912 A, 561 ("amphibien").
1912 B, 218 ("amphibien").
1913 A, ("amphibien").
Gebhardt, F. A. M. W. 1907 A, 77 ("amphibien").
Gegenbaur, C. 1862 A, 179 ("amphibien").
1862 B, pls.
1866 A, 122, 123 ("amphibien").
1867 A, 57 ("amphibien").
1867 B, 369, 395 ("amphibien").
1870 A, 335 ("amphibien").
1870 C, 398 ("amphibien").
1880 A, 586 ("amphibien").
Gelderen, C. 1922 A, 234.
Gervais, P. 1859 A, 491 ("amphibiens").
Giebel, C. G. 1855 A, 98 (Batrachia).
Gill, T. 1873 E, 435 (Batrachia).
1897 A, 446.
1898 A, 697 ("amphibians").
1907 A, 491.
1910 B, 958.
Goeppert, E. 1896 B.
1897 A, 247 ("amphibien").
Goodrich, E. S. 1916 A, 261.
1924 A, 935.
Goodsir, J. 1857 A.
1857 B.
Gray, J. E. 1825 A, 213.
Greene, J. R. 1861 A, 219, 226 (Batrachia).
Gregory, W. K. 1904 A, 57, 58, fig. 10.
1910 A, 113.
1911 A, 509.
1912 D, 220.
1913 D, 806.
1913 E, 17.
1915 D, 317.
1916 D, 105.
1917 B, 311, 315.
1920 A, 114.
1926 B, 425 ("amphibians").
1927 G, 268 ("amphibians").
Gregory and Adams 1915 A, 763.
Gregory and Camp 1918 A.
Gregory, Miner and Noble 1923 A, 280.

Gregory and Noble 1924 A, 436 ("amphibians").
Grote, A. 1926 A, 458 ("amphibien").
Haeckel, E. 1868 A, 436, 448, 453.
1893 A, xvi ("amphibien").
Hanson, F. B. 1919 B, 66.
1920 A, 310.
1920 C, 3 ("amphibians").
Harkness, R. 1852 A, 258 (Batrachiæ).
Hase, A. 1913 A ("amphibien").
Hasse, C. 1873 B, 629 ("amphibien").
1873 D ("amphibien").
1892 C, 5 ("amphibien").
Hasse and Schwarck 1870 A, 34 ("amphibien").
Hatschek, B. 1889 A, 83 ("amphibien").
1889 B, 114 ("amphibien").
Hay, O. P. 1897 B, 774 (Batrachia).
1910 C, 3.
Heilprin, A. 1887 A, 45, 305.
Hertwig, O. 1874 B ("amphibien").
1892 A.
Hilzheimer, M. 1913 A, 473 ("amphibien").
Hoeven, J. v. d. 1866 A, 363 (Batrachia).
Hogg, J. 1839 A.
1841 A, 353.
Hollard, H. 1864 A, 13 ("batraciens").
1864 C, 360, 372 ("amphibiens").
Howes, G. B. 1891 A, 156.
1893 B, 268.
1893 C, 587.
1894 A, 77.
1902 A, 525 (Batrachia).
Howes and Swinnerton 1901 A, 2, 46, 69 (Batrachia).
Hubrecht, A. A. W. 1897 A, 29.
1908 A, 150.
Huene, F. 1907 A, 152-154 ("amphibien").
1908 H, 157-175 ("amphibien").
1910 F, 148-163 ("sauropsiden").
1911 G, 147-161 ("sauropsiden").
1912 D, 102 ("amphibien").
1912 F, 524 ("amphibien").
1922 G, 456 ("amphibien").
1926 A, 262.
Humphry, G. M. 1876 A, 668 ("batrachians").
Huxley, T. H. 1859 D, 401.
1859 H, 44, 46.
1863 E, 418.
1863 F, 427.
1869 G, 453.
1870 F, 528, 538, 549.
1874 B, 6, 9, 16.
1875 D, 23.
1876 E, 108, 124.
1876 F, 168.
1877 A, 58.
1879 A, 400.
1880 E, 471.
Ihering, H. 1880 A, 303 ("amphibien").
Iwanzoff, N. 1894 A, 578 ("amphibien").
Jacobshagen, E. 1920 A, 91 ("amphibien").
Jaekel, O. 1901 B, 53 ("amphibien").
1902 C, 610 ("amphibien").
1903 F, 33, 46 ("amphibien").
1906 D, 188.
1909 A, 193, 210.
1910 D, 123.
1911 A, 126.
Jaekel, O. 1912 A, 610 ("amphibien").
1913 A, 89 ("amphibien").
1927 A, 259 ("amphibien").
Jaekel and Philippi. 1903 A, 13 ("amphibien").
Jordan, D. S. 1898 A, 176 (Batrachia).
1905 A, i, 600; ii, 556.
1907 B, 226.
Juhn, M. 1923 A, 70 ("amphibien").
Julien, A. 1894 A, 174 ("batrachiens").
Kapelkin, W. 1900 A, 433 ("amphibien").
Kehrer, F. A. 1896 A, 347 ("amphibien").
Keith, A. 1911 A, 294.
Kellicott, W. E. 1905 A, 137.
Kerbert, C. 1876 A, 207 ("amphibien").
Kerr, J. G. 1908 A, 169.
1910 A, 203 ("amphibians").
1923 A, 114.
Kesteven, H. 1916 A, 303.
1919 A, 223.
1922 A, 316.
Kingsbury, B. F. 1895 A, 115.
Kingsbury and Reed 1908 A, 81.
1909 A, 549.
Kingsley, J. S. 1894 A, 640 (Batrachia).
1896 A, 147 ("batrachians").
1900 A, 205.
1901 A, 195.
1901 B, 337.
1902 B, 328.
1912 A, 185 ("amphibians").
1912 B, 32.
1925 A, 13, 36, 39, 41, 52, 119, 246, 262, 279.
Klaatsch, H. 1893 B, 651 ("amphibien").
Klaauw, C. J. 1924 B, 573.
Klein, E. F. 1868 A ("amphibien").
Klintz, J. H. 1911 A, 165 ("amphibien").
Koken, E. 1898 B, 142.
Köstlin, O. 1844 A ("batrachier").
Kothe, K. 1910 A, 55 ("amphibien").
Kravetz, L. 1906 A, 6 ("amphibien").
1911 A, 333 ("amphibien").
Kressmann, M. 1912 A, 428 ("amphibien").
Kupffer, C. 1893 A, 525 ("amphibien").
Laaser, P. 1903 A, 571 ("amphibien").
Lakjer, T. 1927 A, 191, 298 ("amphibien").
Larger, R. 1913 A, 702 ("amphibies").
Lavocat, A. 1885 A, 33 ("amphibiens").
1889 A, 43 ("amphibiens").
Lebedinsky, N. G. 1917 A, 316 ("amphibien").
Leche, W. 1887 A ("amphibien").
Le Damany, P. 1902 A, 337 ("batraciens").
1903 B, 275 ("batraciens").
1903 G, 127 ("batraciens").
1906 B, 158 ("batraciens").
Lemoine, V. 1889 A, 233 ("batraciens").
Leunis and Ludwig 1883 A, 599.
Leydig, F. 1873 B, 32.
1887 A, 534 ("batrachier").
1890 A, 441, 448 ("amphibien").
Lobley, J. L. 1908 A, 198.
Lubosch, W. E. 1907 A, 614 ("amphibien").
1908 A, 193 ("amphibien").
1911 A, 325 ("amphibien").
1911 B, 741, 748 ("amphibier").
Lull, R. S. 1904 C, 2.
1910 D, 153.
1917 B, 337.

Lydekker, R. 1903 D, 75.
Malbranc, M. 1875 A ("amphibien").
Mantell, G. A. 1844 A, 782 ("batrachians").
Marsh, O. C. 1899 C, 71 ("amphibians").
Matthes, E. 1921 A, 222 ("amphibien").
Matthew, W. D. 1911 D, 197 ("amphibians").
1915 A, 185, 294.
1916 H, 13 ("amphibians").
1923 C, 405.
Mead, C. S. 1904 A, 53 ("amphibians").
Meckel, J. F. 1825 A ("batrachier").
Meunier, S. 1903 A, 775 ("batraciens").
Miner, R. W. 1925 A, 148, 186.
Mivart, St. G. 1871 B, 374.
Montgomery, T. H. 1901 A, 21733 ("amphibians").
Moodie, R. L. 1908 B, 361.
1908 D, 447.
1908 E, 559.
1908 F, 249.
1908 G, 511.
1909 A, 354.
1909 C, 118, 123.
1909 D, 243.
1909 E, 38.
1909 F, 219, 220.
1910 C, 233.
1911 C, 375.
1911 E, 235.
1911 H, 239, 243.
1912 E, 37.
1913 A, 183.
1914 A, 13.
1915 E, 463.
1915 F, 186.
1915 G, 369.
1915 H, 637, 641.
1915 I, 139, 146 ("amphibians").
1915 J, 317.
1916 A.
1922 B, 320, fig. 1.
Mook, C. C. 1918 A, 468.
Müller, J. 1832 A, 508 (A. nuda).
Nauck, E. T. 1923 A, 2 ("amphibien").
Noble, G. K. 1925 B, 1.
1926 A, 1.
1926 C, 1.
Noordenbos, W. 1905 B, 390 ("amphibien").
Nopcsa, F. 1926 A, 655.
Osborn, H. F. 1899 J, 415.
1905 N, 236.
1916 E, 511, 602.
1917 B, 307.
1926 C, 339 ("amphibians").
Oswald, F. 1911 A, 405.
Owen, R. 1842 F, 83 ("batrachians").
1848 B (Batrachia).
Packard, A. S. 1904 A, 221 ("amphibians").
Paramore, R. H. 1910 A, 1394.
Parker, W. K. 1877 B, 529.
1887 B, 53.
1890 A, 62.
Parker and Haswell 1897 A, 245, 271.
Parsons, F. G. 1903 A, 323.
Perrier, E. 1920 A ("batraciens").
Peter, K. 1898 A ("amphibien").
Peters, W. 1867 A, 726 ("batrachier").
Peters, W. 1868 A, 592 ("amphibien").
1868 B, 388.
Petronievics, B. 1921 A, 107 ("amphibiens").
Pfeiffer, H. 1854 A, 46 ("batrachier").
Pompeckj, J. F. 1912 A, 338.
Pycraft, W. P. 1909 A, 204.
Rabl, C. 1901 A, 520 ("amphibien").
1903 A, 155, 184 ("amphibien").
Raymond, P. E. 1907 A, 835 ("amphibians").
Reed, H. D. 1920 A, 325.
Reichert, K. B. 1837 A, 139 ("amphibien").
1849 A, 477, 494 ("amphibien").
Retterer, E. 1908 A, 486 ("amphibiens").
Reynolds, S. H. 1897 A, 133-188.
Rice, E. L. 1920 A.
Röse, C. 1897 A, 60 ("amphibien").
Rohon, J. V. 1902 A, 25 ("amphibien").
Romer, A. S. 1922 B, 523.
1924 A, 123, figs. 2, 3.
Ryder, J. 1885 E, 91 ("amphibians").
Sabatier, A. 1897 A, 806 ("amphibiens").
1902 A, 99 ("amphibiens").
Sagemehl, M. 1883 A ("amphibien").
Schauinsland, H. 1906 A, 487 ("amphibien").
Schlosser, M. 1898 D, 120 ("amphibien").
1903 G, 145.
Schmalhausen, J. J. 1907 A, 177 ("amphibien").
1908 A, 337 ("amphibien").
1916 B, 138.
1917 A, 102.
1923 B, 544 ("amphibien").
Schöne, G. 1902 A, 8 ("amphibien").
Schuchert, C. 1915 A, 754, 797.
Schuchert and Barrell 1914 A, 25 ("amphibians").
Schuchert and Levene 1927 A, 289 ("amphibians").
Scott, W. B. 1917 A, 33, 144, 155.
Sedgwick, A. 1894 A, 52.
Seeley, H. G. 1872 B, 22.
1887 D, 338.
1888 I, 235.
1900 A, 281.
Semon, R. 1898 A, 100 ("amphibien").
1901 A, 180 ("amphibien").
Serres, M. 1852 A, 144 ("batrachiens").
Sewertzoff, A. 1896 A, 207.
1897 A, 410 ("amphibien").
1908 A.
1926 A, 507.
1926 D, 76 ("amphibien").
Seydel, O. 1899 A ("amphibien").
Shitkov, B. M. 1899 A, 256 ("amphibien").
Shore, T. W. 1887 A, 364.
Sirena, S. 1872 A, 125 ("amphibien").
Sixta, V. 1899 A, 329 ("amphibien").
1901 A, 326 ("amphibien").
1905 A, 674 ("amphibien").
Smith, G. E. 1911 A, 293.
1912 A, 426.
Sollas, W. J. 1916 A, 110.
Sonies, F. 1907 A, 432 ("amphibien").
Spencer, W. B. 1886 A, 173, 220.
Steiner, H. 1921 A, 513 ("amphibien").
Stejneger, L. 1904 A, 924.
1907 A, 1.
Stejneger and Barbour 1917 A, 5.

Steinmann, G. 1907 A, 421.
1908 A, 207 ("amphibien").
Stephan, P. 1900 A, 361 ("batrachiens").
Strecker, C. 1887 A, 303 ("amphibien").
Stromer, E. 1912 A, 54.
Sutton, J. B. 1884 A, 570 ("amphibian").
Taschenberg, O. 1894 A, 3506-3575.
Terra, P. 1911 A, 137, 222 ("amphibien").
Thevenin, A. 1906 A, 145 ("amphibiens").
1909 A, 1223 ("amphibiens").
1910 A, 60 ("amphibiens").
Thyng, F. W. 1906 A, 45.
Tomes, C. S. 1875 A, 93 (Batrachia).
Tornier, G. 1894 A, 96 ("amphibien").
1894 B, 104 ("amphibien").
Traquair, R. H. 1900 C, 506.
Van Gelderen, C. 1925 A, 501 ("amphibien").
Van Wijhe, J. W. 1922 A, 293 ("amphibien").
Vanhöffen, E. 1891 A, 134 ("amphibien").
Veit, O. 1916 A, 375 ("amphibien").
Versluys, J. 1903 A, 167 ("amphibien").
1912 B, 552 ("amphibien").
1912 C, 313.
Vialleton, L. 1917 A, 191 ("amphibiens").
Villiers, C. G. S. 1922 A ("amphibien").
Vitali, G. 1909 A, 208 ("anfibi").
Voit, M. 1923 A, 69 ("amphibien").
Wagner, R. 1843 A, 146 (Batrachia).
Wallace, A. R. 1876 A, i, 489; ii, 559.
Wamich, P. 1913 A, 18 ("amphibien").
Watson, D. M. S. 1913 D, 25 ("amphibians").
1914 I, 532.
1916 C, 632.
1916 E, 85.
1917 A, 981.
1917 C, 168 (Batrachia).
1919 A, 287.
1919 B, 1.
1919 C, 239.
1925 A, 820, 848, 850.
1926 A, 189.
Wegner, R. N. 1922 A, 413 ("amphibien").
Weidenreich, F. 1922 A, 45 ("amphibien").
1926 A, 45 ("amphibien").
Werner, F. 1904 A, 332 ("batrachier").
Wiedersheim, R. 1892 A, 46 ("amphibien").
Wilder, B. 1897 A, 295.
Williston, S. W. 1909 A, 393.
1910 B, 71 ("amphibians").
1912 E, 258.
1912 F, 91.
1913 B, 625 ("amphibians").
1914 A, 3 ("amphibians").
1914 D, 410, 416 ("amphibians").
1916 B, 194, 200.
1917 D, 985.
1918 A, 75 ("amphibians").
1925 A, 1, 18.
Wintrebert, P. 1910 A, 178, 300, 419, 1081 ("amphibiens").
1910 B, 78, 129, 172, 226 ("batraciens").
Woodward, A. S. 1898 E, 329.
1904 D, 141.
1910 B, 464 ("amphibians").
1911 C, 46.
1917 D, lxvii.
1922 B, 29.
Woodward, H. 1878 A, 21.
1904 B, 141.
Woodward and Sherborn 1891 A, 31.
Wright, W. 1909 A, 672.
Ziegler, H. E. 1901 A, 235 ("amphibien").
1923 A, 67, fig. 4 ("amphibien").
Zierler, F. E. 1905 A, 511 ("amphibien").
Zittel, K. A. 1895 A, 306.
1897 A, 128 ("amphibien").
1901 A, 412 ("amphibians").
Zittel and Broili 1911 A, 143.
1923 A, 162-209.
Zittel, Eastman, etc. 1902 A, 114.
Zwick, W. 1897 A, 62.

Subclass PHRACTAMPHIBIA Haeckel.

Haeckel, E. 1866, Gen. Morphol.
Gadow, H. 1898 A, 11.
Haeckel, E. 1868 A, 441, 448.
1873 A, 512.

Order STEGOCEPHALI Cope.

Hay, O. P. 1902 A, 409.
Abel, O. 1908 D (208), ("stegocephalen").
1909 F, 455 ("stegocephalen").
1910 B (185, 186), ("stegocephalen").
1912 F, 212, 384, 414, 702.
1919 A, 233, fig. 251 (Stegocephalia).
1920 A, 346 ("stegocephalen").
1921 A, 144, 246, 252 ("stegocephalen").
1926 B, 208 ("stegocephalen").
Allis, E. P. 1898 A, 443.
1905 A, 494.
1919 B, 82.
1923 A, 48, 49.
Amalitsky, V. P. 1924 A, 62 (Stegocephalia).
1924 B, 67 (Stegocephalia).
Anthony, R. 1912 A ("stégocephales").
1913 A, 243, 269 ("stégocephales").
Arldt, T. 1907 D, 683.
1907 E, 204 (Stegocephala).
Arldt, T. 1909 B, 353 ("stegocephalen").
1916 A, 96 ("stegokephalen").
Arthaber, G. 1910 A, 552 ("stegocephalen").
Bardeleben, K. 1901 A, 37 ("stegocephalen").
1907 A, 36 ("stegocephalen").
1907 B, 154 ("stegocephalen").
Bluntschli, H. 1912 B, 380 ("stegocephalen").
Boas, J. E. V. 1914 B, 553 ("stegocephalen").
1914 C, 240 ("stegocephalen").
Bogoljubsky, S. 1914 A, 661 (Stegocephala).
Boulenger, G. A. 1901 B, 401 (Stegocephalia).
1902 F, 382 (Stegocephalia).
1904 C, 479 (Stegocephala).
1917 C, 457 ("stégocéphales").
Brauns, D. 1890 A, 161.
Braus, H. 1906 A, 246 ("stegocephalen").
Broili, F. 1904 A, 7, 105 ("stegocephalen").
1904 D, 578 ("stegocephalen").
1905 A, 12 ("stegocephalen").

Broili, F. 1908 D, 235 ("stegocephalen").
1917 A, 564 ("stegocephalen").
1926 A ("stegocephalen").
Broom, R. 1903 B, 499 ("stegocephalians").
1904 B, 90 (Stegocephalia).
1908 A, 1049 (Stegocephalia).
1909 B, 162.
1910 C, 475 ("stegocephalians").
1913 B, 465 ("stegocephalian").
1913 H, 73.
1917 A, 976, 977 ("stegocephs").
1922 A, 23 ("stegocephalians").
Case, E. C. 1911 B, 14, 15.
1915 A, 96.
1921 D, 338 ("stegocephalians").
1924 B, 7.
Cope, E. D. 1885 DD, 305.
1891 N, 28.
Credner, H. 1882 B, 1 ("stegocephalen").
1893 A, 639 ("stegocephalen").
Cunningham and Boulenger 1912 A, 159, 168, 170.
Dabelow, A. 1926 A, 96 ("stegocephalen").
Dames, W. 1899 B, 365.
Davidson, A. 1895 A, 407.
Depéret, C. 1912 A, 703 ("stégocephales").
Döderlein, L. 1900 A, 329 ("stegocephalen").
Dollo, L. 1884 D, 86.
Drevermann, F. 1920 A ("stegocephalen").
Du Toit,. R. J. 1911 A, 420 (Stegocephalia).
Eggeling, H. 1906 A, 107 ("stegocephalen").
Eimer, G. H. T. 1901 A, 63 ("stegocephalen").
Emery, C. 1901 A, 672 ("stegocephalen").
Fejérváry, G. J. 1921 C, 11 ("stegocephalen").
Frassetto, F. 1915 A ("stegocefali").
Fuchs, H. 1908 B, 589 ("stegocephalen").
1909 B, 113 ("stegocephalen").
1909 C, 87 ("stegocephalen").
1909 D, 29 ("stegocephalen").
1910 A, 45 ("stegocephalen").
1911 B, 398 ("stegocephalen").
1912 B, 89 ("stegocephalen").
1920 A (Stegocephalia).
Fürbringer, M. 1902 A, 215 ("stegocephalen").
1904 A ("stegocephalen").
Geinitz and Deichmüller 1882 B, 13 ("stegocephalen").
Gadow, H. 1901 B, 78 (Phractamphibia).
1902 B, 359 (Stegocephala).
Gaupp, E. 1895 A, 56, seq. ("stegocephalen").
1905 D, 932 ("stegocephalen").
1906 A, 56 ("stegocephalen").
1910 A, 535 ("stegocephalen").
1912 A, 562 ("stegocephalen").
1913 A, 88 (Stegocephala).
Gebhardt, F. A. M. W. 1907 A, 82 ("stegocephalen").
Gill, T. 1898 A, 697 ("stegocephals").
Goodrich, E. S. 1924 A, 935 (Stegocephala).
Gregory, W. K. 1913 D, 806 (Stegocephalia).
1913 E, 4 ("stegocephalians").
1915 D, 322, 334, 365.
1920 A, 221.
1922 A, 10 ("stegocephs").
Gregory and Adams 1915 A, 763 ("stegocephalians").
Hase, A. 1907 A, 656 ("stegocephalen").
Heilmann, G. 1926 A, 207 ("stegocephalians").
Heilprin, A. 1887 A, 310 (Stegocephala).
Hilzheimer, M. 1913 A, 474 ("stegocephalen").
Hommes, J. H. 1924 A, 36 (Stegocephalia).
Howes, G. B. 1902 A, 525 (Stegocephala).
Howes and Swinnerton 1901 A, 2, 3, 54, 69, 70 (Stegocephalia).
Hubrecht, A. A. W. 1897 A, 30.
Huene, F. 1909 D, 325 ("stegocephalen").
1911 B, 398 ("stegocephalen").
1912 D, 102 ("stegocephalen").
1913 G, 501 ("stegocephalen").
1920 F, 533 ("stegocephalen").
1922 G, 395-460 ("stegocephalen").
Jaekel, O. 1901 B, 53 ("stegocephalen").
1902 A, 107 ("stegocephalen").
1902 D, 127 ("stegocephalen").
1903 A, 133 ("stegocephalen").
1903 F, 28, fig. 1 (Stegocephala).
1904 B ("stegocephalen").
1904 C, 185 ("stegocephalen").
1905 B, 61 ("stegocephalen").
1905 C, 144 ("stegocephalen").
1906 A, 28 ("stegocephalen").
1908 A, 140 ("stegocephalen").
1909 A, 194.
1913 A, 86 ("stegocephalen").
1916 A, 175 ("stegocephalen").
1921 A, 222 ("stegocephalen").
1922 A, 1 (Hemispondyla, Miosauria).
Kehrer, F. A. 1896 A, 353 ("stegocephalen").
Kingsley, J. S. 1900 B, 167 ("stegocephals").
1901 A, 204.
1901 B, 338 ("stegocephalans").
1902 B, 333 ("stegocephals").
1925 A, 36, 121, 279.
Klaatsch, H. 1890 A, 232 ("stegocephalen").
Koken, E. 1893 B, 240, 269 ("stegocephalen").
Lakjer, T. 1927 A ("stegocephalen").
Lucas, F. A. 1902 B, 119.
Lull, R. S. 1917 B, 487 (Stegocephalia).
1924 A, chart (Stegocephalia).
Lydekker, R. 1903 D, 75 (Stegocephalia).
Matthew, W. D. 1908 D, 816 (Stegocephalia).
1915 A, 185, 294 (Stegocephalia).
Mayhew, R. L. 1924 A, 317 (Stegocephalia).
Miner, R. W. 1925 A, 148 (Stegocephalia).
Mollier, S. 1897 A, 3 ("stegocephalen").
Moodie, R. L. 1908 B, 373 (Stegocephala).
1908 G, 512, fig. 1 (Stegocephalia).
1909 C, 118, 119, 123 (Stegocephala).
1909 D, 243 (Stegocephala).
1909 F, 220 (Stegocephala).
1911 C, 380 (Stegocephalia).
1912 D, 326 (Stegocephala).
1913 A, 183.
1915 G, 371 (Stegocephalia).
Nauck, E. T. 1923 A, 2 ("stegocephalen").
Nopcsa, F. 1923 E, 1047, 1052.
1926 A, 635 (Stegocephalia).
Osborn, H. F. 1903 H, 457, 506.
1904 M, 257 (Stegocephala).
Pehrson, T. 1922 A, 53 ("stegocephals").
Perrier, E. 1920 A, 281 ("stégocéphales").
Perrin, A. 1889 A, 521 ("stégocéphales").
Petronievics, B. 1921 A, 105 ("stégocéphales").
Pompeckj, J. F. 1912 A, 338, 346 ("stegocephalen").

Puccioni, N. 1908 A, 56 ("stegocefali").
Rabl, C. 1903 A, 166, 180 ("stegocephalen").
Romer, A. S. 1922 B, 519, 523 (Stegocephalia).
Schmalhausen, J. J. 1916 B, 147 ("stégocéphales").
1917 A, 106 (Stegocephala).
1917 B, 134 (Stegocephala).
Schuchert, C. 1914 B, 279 (Stegocephalia).
1915 A, 802.
Schwartz, H. 1908 A, 315 ("stegocephalen").
1908 B, 63 ("stegocephalen").
Sewertzoff, A. N. 1908 A, 359, 363 (Stegocephala).
1926 D, 94 (Stegocephala).
Smith, G. E. 1911 A, 294 (Stegocephalia).
1912 A, 427 (Stegocephalia).
Sollas, W. J. 1916 A, 115.
Steiner, H. 1921 A, 534 ("stegocephalen").
1922 A, 340 ("stegocephalen").
Steinmann, G. 1907 A, 421 (Stegocephala).
1908 A, 206 ("stegocephalen").
Stensiö, E. A. 1921 A, 142 ("stegocephalians").
Sterling, S. 1908 A, 166, 180 ("stegocephalen").
Stremme, H. 1909 A, 504 ("stegocephalen").
Stromer, E. 1912 A, 57 (Stegocephali); 60 (Labyrinthodontii).
1913 A, 61 ("stegocephalen").
Suschkin, P. 1910 A, 250 (Stegocephala).
Terra, P. 1911 A, 225 (Stegocephala).
Thevenin, A. 1909 A, 1223 ("stégocéphales").
1910 A, 4 (stégocéphales").
Thyng, F. W. 1906 A, 43 (Stegocephala).
Tims, H. W. M. 1903 A, 132 (Stegocephala).
Versluys, J. 1912 B, 575 ("stegocephalen").
Villiers, C. G. S. 1922 A, 172, 218 (Stegocephalia).
Watson, D. M. S. 1912 A, 1 (Stegocephalia).
Watson, D. M. S. 1912 B, 586 (Stegocephalia).
1913 C, 341 (Stegocephalia).
1913 D, 24 (Stegocephalia).
1913 F, 957 (Stegocephalia).
1914 A, 310.
1914 C, 396 (Stegocephalia).
1914 D, 167 (Stegocephalia).
1914 F, 780 (Stegocephalia).
1916 E, 83 (Stegocephalia).
1917 A, 983 ("stegocephs").
1919 B, 2 (Stegocephalia).
Wegner, R. N. 1922 A, 464.
Wilckens, O. 1911 A, 708 ("stegocephalen").
Williston, S. W. 1904 B, 178.
1908 B, 396.
1909 A, 394.
1910 E, 540.
1914 A, 2 (Stegocephalia).
1916 B, 200 (Stegocephalia).
1918 A, 75.
1925 A, 31, 91, 96, 99, 119, 122, 126, 132 (Stegocephalia).
Wills, L. J. 1916 A, 5 (Stegocephalia).
Wiman, C. 1910 A, 34 ("stegocephalen").
1915 A, 1 ("stegocephalen").
1916 D, 413 ("stegocephalians").
Wintrebert, P. 1910 A, 1081 ("stégocéphales").
1910 B, 79 ("stégocéphales").
Woodward, A. S. 1897 C, 371 (Labyrinthodontia).
1909 A, 324 (Stegocephala).
1910 B, 464 (Stegocephala).
1911 C, 46 (Stegocephalia).
1922 B, 27, 29 (Stegocephala).
Zittel and Broili 1911 A, 147.
1923 A, 161.
Zittel, Eastman, etc. 1902 A, 117 (Stegocephalia).

Suborder Branchiosauria.

Hay, O. P. 1902 A, 410 (Microsauria, part).
Abel, O. 1912 F, 219 ("branchiosaurier").
1919 A, 294 (Phyllospondyli).
Arldt, T. 1907 D, 662 (Lepospondyli).
1916 A, 97 ("branchiosaurier").
Boulenger, G. A. 1901 B, 401.
1902 F, 383.
Broili, F. 1904 A, 26 (Lepospondyli).
1908 E, 298 (Lepospondyli).
Bullman, O. M. B. 1928 A, 250 ("branchiosaurs").
Day, H. 1915 A, 430.
Frassetto, F. 1915 A, 29.
Fuchs, H. 1909 B, 149 (Branchisauri).
1909 D, 55 ("branchiosaurier").
Gadow, H. 1901 B, 80 (Branchiosauri, Lepospondyli).
Gregory, W. K. 1915 D, 365.
Huene, F. 1913 G, 501 ("branchiosaurier").
1926 A, 262.
Jaekel, O. 1909 A, 194 (Lepospondyli); 204 (Branchiosauri).
1911 A, 109 (Branchiosauri).
1922 A, 3 (Branchiosauri).
Lohest, M. 1888 B, cxx ("amphibien").
Lydekker, R. 1909 C, 469.
1910 F, 672.
Moodie, R. L. 1908 B, 363, 373.
Moodie, R. L. 1908 E, 566.
1908 G, 516.
1909 C, 118, 121.
1909 E, 38, 39.
1909 F, 220.
1909 G, 362.
1910 F, 234.
1911 H, 243.
1912 D, 324, 326.
1912 E, 35.
1915 F, 189, 190.
1916 A, 4, 50 (Branchiosauria); 75 (Lepospondyli).
Pompeckj, J. F. 1912 A, 341, 342 ("branchiosaurier").
Schwartz, H. 1908 A, 315 (Lepospondyla).
Sollas, W. J. 1920 A, 526.
Steinmann, G. 1907 A, 422 (Branchiosauri).
Stromer, E. 1912 A, 59 (Phyllospondyli).
Thevenin, A. 1910 A, 4, 5 ("phyllospondyles").
Watson, D. M. S. 1914 D, 171 ("branchiosaurs").
1917 C, 169, 181 (Phyllospondylia, Lepospondylia).
1919 C, 239.
1921 C, 73 (Phyllospondyli).
Williston, S. W. 1912 B, 657 (Lepospondyli).
1912 E, 258 ("branchiosaurs").

Williston, S. W. 1916 B, 209 (Lepospondyli).
1925 A, 119.
Wintrebert, P. 1910 A, 1081 ("branchiosauriens").
1910 B, 226 (Branchiosaurus).
Zittel and Broili 1911 A, 160 (Phyllospondyli).
1923 A, 198 (Phyllospondyli).
Zittel, Eastman, etc. 1902 A, 124 (Phyllospondyli).

PROTRITONIDÆ Lydekker.

Nicholson and Lydekker 1889 A, 1022, 1039.
Hay, O. P. 1902 A, 410.
Unless otherwise indicated the authors, as quoted, use for this family the name Branchiosauridæ, and for the genus *Protriton* the name *Branchiosaurus*.
Abel, O. 1912 F, 213 (Branchiosaurus).
1919 A, 295.
Arldt, T. 1907 D, 277.
1908 A, 1.
1912 A, 650, 658.
Bulman and Whittard 1926 A, 536.
Credner, H. 1882 B (Branchiosaurus).
1882 C, 43 (Branchiosaurus).
1893 A, 683, 698, 703 (Branchiosauridæ).
Deichmüller, J. V. 1884 A, 5, pl. i (Protriton).
Eimer, G. H. T. 1901 A, 196 (Branchiosaurus).
Fejérváry, G. J. 1920 A, 363.
Fritsch, A. 1879 A, 720 (Protriton).
1883 A, 69 (Branchiosauridæ).
Fuchs, H. 1909 C, 87.
1909 D, 29 (Branchiosaurus).
1910 A, 45 (Branchiosaurus).
Gaudry, A. 1875 A, 300 (Protriton).
1875 E, 442 (Salamandrella).
1876 A, 721 (Protriton).
1878 A, 957 (Protriton).
Gaupp, E. 1911 E, 406 (Branchiosaurus).
Geinitz and Deichmüller 1882 B, 13, 30, 41 (Branchiosaurus).
Gregory, W. K. 1911 A, 509 ("branchiosaurs").
1915 D, 375, fig. 15 (Brachiosaurus).
1917 B, 313, 316, 318.
Huene, F. 1913 G, 502, figs. 1, 11, 19, 20 (Branchiosaurus); 505 (Branchiosauridæ).
1920 C, 211.
Jaekel, O. 1903 A, 119 (Branchiosaurus).
1903 F, 32 (Branchiosaurus).
1909 A, 204.
Jaekel, O. 1909 B, 588, figs. 1, 2 (Branchiosaurus).
1922 A, 2 ("branchiosauriden").
1927 A, 259 ("branchiosauriden").
Kesteven, H. L. 1919 A, 223, fig. 1 (Branchiosaurus).
Kingsley, J. S. 1902 C, 333 (Branchiosaurus).
Lakjer, T. 1927 A, 199, fig. 76 (Branchisaurus).
Moodie, R. L. 1909 E, 43 (Branchiosaurus).
1910 A, 369.
1910 C, 234.
1911 C, 382.
1912 D, 326.
1915 F, 186.
Noble, G. K. 1925 C, 7 ("branchiosaurs").
Perrin, A. 1899 A, 521, figs. 1, 3 (Branchiosaurus).
Perrier, E. 1920 A, 277 (Branchiosaurus).
Schönfield, G. 1911 A, 19, pls. i-iii (Branchiosaurus).
Schwarz, H. 1908 A, 324 (Branchiosaurus).
Seitz, A. L. L. 1907 A, 249 (Branchiosaurus).
Stadtmüller, F. 1926 A, 159, fig. 5 (Branchiosaurus).
Stappenbeck, R. 1905 A, 401 (Branchiosaurus).
Steiner, H. 1921 A, 535 (Branchiosauridæ).
Steinmann, G. 1908 A, 207 ("branchiosaurier").
Thevenin, A. 1905 A, 1268 (Branchiosaurus).
1906 A, 146 (Branchiosaurus).
1909 A, 1223 (Protriton).
1910 A, 5, 27 (Branchiosaurus).
Thyng, F. W. 1906 A, 44, fig. C (Branchiosaurus).
Watson, D. M. S. 1917 C, 170.
1921 C, 72 (Branchiosaurus).
Wintrebert, P. 1910 A, 1082.
1910 B, 78, 172 ("protritonides").
Woodward, A. S. 1898 E, 329 (Branchiosaurus).
Zittel and Broili 1911 A, 160.
Zittel, Eastman, etc. 1902 A, 124.

MICRERPETON Moodie. Type *M. caudatum* Moodie.

Moodie, R. L. 1909 E, 39.
Arldt, T. 1916 A, 98.
Bulman and Whittard 1926 A, 578.
Moodie, R. L. 1908 G, 535.
1912 D, 327, 330.
1915 E, 463.
1915 G, 369.
1915 J, 322.
1916 A, 51.
Pompeckj, J. F. 1912 A, 342.
Watson, D. M. S. 1917 C, 170.
1921 C, 72.
Zittel and Broili 1911 A, 162.
1923 A, 199.
Lydekker, R. 1910 F, 672.
Miner, R. W. 1925 A, 171.
Moodie, R. L. 1908 B, 362, figs. 1, 3.
1908 E, 564, fig. 4.
1908 G, 516, figs. 4, 5.
1909 C, 118.
1910 A, 368.
1910 C, 233.
1911 H, 242, pl. ii, fig. 1.
1912 A, 277.
1912 D, 326, 330, 331.
1914 A, 22.
1915 J, 322.
1916 A, 52, pl. ii; pl. xxv, fig. 4; text-fig. 13.

Micrerpeton caudatum Moodie.

Moodie, R. L. 1909 E, 38, 39, figs. 1-6.
Pennsylvanian (Mazon Creek); Illinois.

EUMICRERPETON Moodie. Type *E. parvum* Moodie.

Moodie, R. L. 1910 A, 369.
Arldt, T. 1916 A, 98.
Bulman and Whittard 1926 A, 578.
Gregory, W. K. 1917 B, 311.
Moodie, R. L. 1912 D, 330.
1915 E, 463.
1916 A, 57.
Osborn, H. F. 1917 B, 179, fig.
Schuchert and Levene 1927 A, 290, fig.
Watson, D. M. S. 1921 C, 72.

Eumicrerpeton parvum Moodie.

Moodie, R. L. 1910 A, 369, figs. 1-4.
1911 B, 429, fig. 1.
1912 A, 277.
1912 D, 326, 331, pl. iii, figs. 3, 4; pl. iv; pl. v, fig. 1; pl. vi, figs. 1, 2.
1914 A, 19.
1915 I, 146.
1915 J, 323, figs. 5, 6.
1916 A, 57, pl. iii, figs. 1, 2; pl. v, fig. 1; text-figs. 14, 15.
Pennsylvanian (Mazon Creek); Illinois.

MAZONERPETON Moodie. Type *M. longicaudatum* Moodie.

Moodie, R. L. 1912 D, 336.
Bulman and Whittard 1926 A, 578.
Moodie, R. L. 1916 A, 61, pl. v, fig. 2.
Watson, D. M. S. 1921 C, 72.

Mazonerpeton costatum Moodie.

Moodie, R. L. 1912 D, 326, 341, pl. ii, fig. 3; pl. viii, fig. 4; pl. ix, fig. 2; pl. x.
1912 A, 278.
1914 A, 22.
Moodie, R. L. 1916 A, 63, pl. iv, fig. 3; text-fig. 15.
Pennsylvanian (Mazon Creek); Illinois.

Mazonerpeton longicaudatum Moodie.

Moodie, R. L. 1912 D, 326, 337, pl. iii, figs. 1, 2; pl. vii, fig. 3; pl. x.
1912 A, 278.
1914 A, 22.
1916 A, 61, pl. iii, figs. 5, 6; text-fig. 14*a*.
Pennsylvanian (Mazon Creek); Illinois.

SPARODUS Fritsch. Type *S. validus* Fritsch.

Hay, O. P. 1902 A, 411.
Moodie, R. L. 1909 E, 40.
1912 D, 326.
The systematic relationships of this genus are in doubt.

Sparodus sp. indet.

Hay, O. P. 1902 A, 411.
Lambe, L. M. 1904 C, 19, 35, 45.
Moodie, R. L. 1914 A, 26.
1916 A, 66.
Pennsylvanian (Joggins); Nova Scotia.

Suborder DIPLOCAULIA Moodie.

Moodie, R. L. 1909 F, 220.
Case, E. C. 1911 B, 90.
Gregory, W. K. 1917 B, 316 (Euamphibia).
Moodie, R. L. 1909 D, 243 (Euamphibia, in part; Diplocaulia).
1909 F, 220 (Euamphibia, in part).
1911 H, 243 (Euamphibia, in part).
1912 A, 278 (Euamphibia, in part).
Moodie, R. L. 1912 D, 326 (Euamphibia, in part).
1912 E, 31.
1915 F, 190.
1915 H, 638.
1916 A, 34, 46.
Williston, S. W. 1916 B, 209 (Lepospondyli).

DIPLOCAULIDÆ Cope.

Hay, O. P. 1902 A, 416.
Arldt, T. 1909 B, 354 ("diplocauliden").
1912 A, 656.
1916 A, 101, 143 ("diplocauliden").
Broili, F. 1902 A, 539.
1904 A, 26.
1905 A, 14.
Case, E. C. 1911 B, 14, 15, 79, 85.
1915 A, 96.
Huene, F. 1912 E, 472 ("diplocauliden").
Huene, F. 1913 G, 505 (Nectridei).
Gregory, W. K. 1917 B, 313.
Moodie, R. L. 1913 A, 190.
Watson, D. M. S. 1917 C, 170.
Williston, S. W. 1909 D, 131.
1910 D, 534.
1912 B, 657.
1916 B, 209.
Zittel and Broili 1911 A, 165.
1923 A, 202.

DIPLOCAULUS Cope. Type *D. salamandroides* Cope.

Hay, O. P. 1902 A, 416.
Abel, O. 1919 A, 231, 303, fig. 183.
1920 A, 353.
1921 A, 298.
Anonymous 1912 A, 519.
Arldt, T. 1916 A, 101.
Broili, F. 1902 A, 536, fig. 3.
1904 A, 7, 26, 28, 48.
1905 A, 13.
1913 A, 98.
1913 C, 529.
1914 B, 166 (Batrachiderpeton a syn.?).

Broom, R. 1903 B, 499.
1910 A, 214.
Case, E. C. 1900 A, 722.
1908 C, 579.
1908 D, 567, figs. 12, 13.
1911 B, 14, 15, 79, 85.
1915 A, 111, 115, 125.
Cummins, W. F. 1908 A, 745.
Douthitt, H. 1917 B, 3-40, figs. 2-4, 6, 7.
Geol. Mag. 1912 A, 519.
Gregory, W. K. 1917 B, 312, 316.
Huene, F. 1912 E, 472.
1913 G, 503, fig. 3.
1919 A, 181.
1922 G, 447, 452.
Jaekel, O. 1903 A, 117, 125, 126, figs. 5, 6.
1914 A, 209.
Kingsley, J. S. 1925 A, 122, fig. 128.
Lakjer, T. 1927 A, 192, 198, 205.
Matthew, W. D. 1909 G, 93, figs. 3, 4.
Mehl, M. G. 1912 C, 409.
1921 A, 48.
Moodie, R. L. 1908 G, 520, 521.
1909 F, 220.
1911 C, 377.
1912 E, 31.
1913 A, 190.
1915 G, 372.
1915 J, 318.
Neumayer, L. 1904 A, 121.
Nopcsa, F. 1923 E, 1052, fig. 9.
Osborn, H. F. 1902 B, 93, fig. 1.
1916 E, 613, figs. 24, 25.
1917 B, 179, 180, 182, figs.
Romer, A. S. 1922 B, 557, 587, pl. xxxvii.
1925 B, 461.
Schuchert, C. 1910 A, 570.
Sternberg, C. H. 1909 C, 227.
Watson, D. M. S. 1913 F, 960.
1916 E, 86.
1917 C, 170.
1919 B, 58.
Williston, S. W. 1909 D, 122.
1910 A, 271, pl. xv, fig. 7.
1910 F, 600.
1911 D, 379.
1913 B, 627.
1914 C, 59.
1915 A, 578.
1916 B, 210, fig. 52.
1917 A, 316.
1918 B, 110.
1925 A, 162.
Zittel and Broili 1911 A, 165.
1923 A, 174, 202, figs. 271, 285, 308.

Diplocaulus copei Broili.

Broili, F. 1904 A, 21, pl. ii; pl. iii, figs. 1, 2.
1902 A, 536 (Name only).
Case, E. C. 1911 B, 22, 79, pl. v, figs. 1, 2.
1915 A, 96.
Douthitt, H. 1917 B, 4.
Moodie, R. L. 1914 A, 17.
Sternberg, C. H. 1909 C, 254, 255.
Williston, S. W. 1909 D, 122.
1910 D, 534.
1918 B, 110.
Permian (Clear Fork); Texas.

Diplocaulus limbatus Cope.

Hay, O. P. 1902 A, 416.
Beede, J. W. 1907 A, 120, 139.
Broili, F. 1904 A, 7, 24.
Case, E. C. 1902 B, 63 (This species?).
1911 B, 17, 79, 85, 91, pl. i, text-fig. 1.
1915 A, 96.
Cummins, W. F. 1908 A, 743.
Douthitt, H. 1917 B, 4, 33, fig. 7.
Huene, F. 1912 E, 472, figs. 1-3.
1913 B, 366, fig. 50.
Moodie, R. L. 1911 C, 377.
1912 E, 32.
1914 A, 17.
Williston, S. W. 1909 D, 122, pls. i-v.
1918 B, 110.
Permian (Clear Fork); Texas.

Diplocaulus magnicornis Cope.

Hay, O. P. 1902 A, 416.
Abel, O. 1919 A, 305, figs. 227, 228.
1920 A, 353, fig. 558.
Beede, J. W. 1907 A, 119, 139.
Broili, F. 1902 A, 537, figs. 1, 2, 3.
1904 A, 7, 8, pl. i; pl. iv, figs. 4-15; pl. v, figs. 1-4.
Case, E. C. 1902 B, 63 (This species?).
1911 B, 18, 79, 88, 91, pls. ii, iii; pl. iv, fig. 1; pl. xii, fig. 3; text-figs. 2, 21-23.
1915 A, 96, 125, text-fig. 13.
Cummins, W. F. 1908 A, 743.
Douthitt, H. 1917 B, 4, 33, figs. 1, 5, 7.
Gould, C. W. 1901 A, 339.
Jaekel, O. 1911 A, 121, fig. 135.
Moodie, R. L. 1908 E, 564, fig. 5.
1908 G, 521, figs. 9-10.
1912 E, 31, pls. i, ii.
1914 A, 17.
Phillips, W. B. 1912 A, 38.
Sternberg, C. H. 1903 E, 94.
1909 C, 240, 253, 255, fig. 34.
Williston, S. W. 1902 N, 60 (D. magnicornos).
1909 D, 122.
1918 B, 110.
Permian (Clear Fork); Texas.

Diplocaulus primigenius Mehl.

Mehl, M. G. 1921 A, 48, figs. 1, 2.
Permian; Texas.

Diplocaulus pusillus Broili.

Broili, F. 1904 A, 24, pl. vi, figs. 1-4.
Broili, F. 1902 A, 536 (Name only).
1913 A, 100.
Case, E. C. 1911 B, 22, 79, 85, text-fig. 3.
1915 A, 96, 131.
Douthitt, H. 1917 B, 4, 34.
Moodie, R. L. 1914 A, 17.
Williston, S. W. 1909 D, 122.
1910 D, 534.
1918 B, 110.
Permian (Clear Fork); Texas.

Diplocaulus salamandroides Cope.

Hay, O. P. 1902 A, 416.
Beede, J. W. 1907 A, 139.
Broili, F. 1902 A, 539.

Broili, F. 1904 A, 7.
Case, E. C. 1900 A, 710, pl. i, figs. 16, 17; pl. v, fig. 17.
1902 B, 63.
1911 B, 16.
1915 A, 96.
Cope and Matthew 1915 A, pl. iii, figs. 21-23.
Douthitt, H. 1917 B, 4, 33.
Moodie, R. L. 1912 E, 38.
Moodie, R. L. 1914 A, 17.
Williston, S. W. 1909 D, 122.
Pennsylvanian (Upper); Illinois: Permian (Wichita); Texas: (Enid); Oklahoma.

Diplocaulus sp. indet.

Phillips, W. B. 1912 A, 41. Permian (Wichita); Texas.
Wegeman, C. H. 1915 A, 26. Permian (Wichita); Oklahoma.

PLATYOPS Williston. Type *P. parvus* Williston.

Williston, S. W. 1918 B, 110.
Huene, F. 1922 G, 447.

Platyops parvus Williston.

Williston, S. W. 1918 B, 110, fig. 19.
Permian; Texas.

Suborder MICROSAURIA Cope.

Hay, O. P. 1902 A, 410.
Arldt, T. 1907 D, 277 (Microsauridæ); 636 (Microsauria); 662 (Lepospondyli).
1907 E, 204 ("aistopoden").
1909 B, 354 ("microsaurier").
1916 A, 96, 101, 143 ("mikrosaurier").
Boulenger, G. A. 1901 B, 401.
1902 F, 383.
1904 C, 480.
1917 C, 458 ("microsauriens").
Broili, F. 1904 A, 26 (Lepospondyli).
1908 E, 298 (Lepospondyli).
1913 B, 520.
Broom, R. 1904 C, 109.
Carus, V. 1875 A, 485.
Case, E. C. 1908 C, 578.
1911 B, 14, 85.
1915 A, 96.
Cope, E. D. 1891 N, 28, 29 (Microsauri).
Cunningham and Boulenger 1912 A, 174.
Depéret, C. 1907 B ("microsauriens").
Dawson, J. W. 1888 A, 393.
Dollo, L. 1884 D, 91.
Fürbringer, M. 1902 A, 217.
Gadow, H. 1901 B, 288 (Microsauri); 80 (Lepospondyli); 81 (Aistopodes).
1902 B, 359 (Microsauri).
Goodrich, E. S. 1916 A, 263.
Gregory, W. K. 1911 A, 509.
1915 D, 365 (Microsauria, Aistopoda).
1917 B, 318 (Microsauria, Aistopoda).
Gregory, W. K. 1917 B, 312 ("microsaurs").
1920 A, 224 ("microsaurs").
Huene, F. 1912 E, 472 ("mikrosaurier").
1912 F, 524 ("mikrosaurier").
1913 G, 505.
1920 C, 211.
1926 A, 262 ("mikrosaurier").
Jaekel, O. 1906 D, 189.
1909 A, 194 (Lepospondyli); 194, 205, 209 (Microsauria); 209 (Aistopodi).
1909 B, 599.
1910 C, 324.
1910 D, 123.
1911 A, 117 (Microsauria); 119 (Aistopodi).
1914 A, 203 ("mikrosaurier").
Lydekker, R. 1912 C, 15.
Mehl, M. G. 1912 C, 408.
Miner, R. W. 1925 A, 172 ("microsaurs").
Moodie, R. L. 1908 B, 363 (Microsauria, Aistopoda).
1908 F, 253 (Microsauria, Aistopoda).
1908 G, 512 (Microsauria); 516, 520 (Aistopoda).
1909 B, 15 (Microsauria); 25 (Aistopoda).
1909 C, 118, 120 (Microsauria, Aistopoda).
1909 D, 243.
1909 E, 38 (Microsauria), 39 (Aistopoda).
1909 F, 216, 220 (Microsauria, Aistopoda).
1909 G, 362.
1910 F, 234.
1911 C, 382.
1911 H, 241 (Microsauria); 243 (Aistopoda).
1912 D, 326, 327, 351 (Microsauria); 326 (Lepospondylia).
1912 E, 35.
1915 F, 190.
1915 G, 373.
1915 H, 636.
1916 A, 4, 75, 76 (Microsauria); 75 (Lepospondylia); 5, 76 (Aistopoda a syn.).
1928 B, 216.
Nopcsa, F. 1923 H, 16, 135, 148.
Perrier, E. 1920 A, 281 ("microsauriens").
Pompeckj, J. F. 1912 A, 343, 346 ("microsaurier," "aistopoden").
Romer, A. S. 1922 B, 523 (Lepospondyli).
1925 B, 461 (Lepospondylia).
Schwarz, H. 1908 A, 324 ("aistopoden"); 315 (Lepospondylia).
1908 B, 67 (Aistopoda); 79 (Microsauria); 93 (Lepospondyla).
Steinmann, G. 1908 A, 208 ("microsaurier").
Stromer, E. 1912 A, 59 (Lepospondyli).
Swinnerton and Howes 1901 A, 70.
Thevenin, A. 1906 A, 161.
1910 A, 39 ("aistopodes"); 40, 42 ("microsauriens").
Watson, D. M. S. 1914 D, 171 ("microsaurs").
Williston, S. W. 1908 B, 400.
1909 A, 393 ("microsaurs").
1909 D, 131.
1910 D, 531.
1910 F, 599 (Branchiosauria, Lepospondyli).
1912 B, 655, 658 (Microsauria); 657 (Lepospondyli).
1912 E, 258.
1916 B, 209 (Lepospondyli).

Woodward, A. S. 1910 B, 464.
1911 C, 46.

Zittel and Broili 1911 A, 162 (Lepospondyli).
1923 A, 199 (Lepospondyli).
Zittel, Eastman, etc. 1902 A, 125 (Lepospondyli).

HYLONOMIDÆ Fritsch.

Hay, O. P. 1902 A, 412.
Abel, O. 1919 A, 309.
Cope, E. D. 1891 N, 30.
Gregory, W. K. 1917 B, 313, 318.
Huene, F. 1913 G, 505.
1926 A, 262.

Jaekel, O. 1909 A, 209.
1911 A, 66.
Moodie, R. L. 1916 A, 78.
Schwarz, H. 1908 B, 102 ("hylonomiden").
Zittel and Broili 1923 A, 199.
Zittel, Eastman, etc. 1902 A, 125 (Microsauridæ).

HYLONOMUS Dawson. Type *H. lyelli* Dawson.

Hay, O. P. 1902 A, 412.
Abel, O. 1919 A, 345.
Bell, W. A. 1913 A, 341.
Boulenger, G. A. 1902 F, 383, fig. 3.
Broili, F. 1908 F, 58.
1913 B, 520.
Case, E. C. 1908 C, 578.
Depèret, C. 1912 A, 704.
Gadow, H. 1901 B, 289.
1902 B, 359, 361.
Heilprin, A. 1887 A, 310.
Huxley, T. H. 1863 C, 571.
Lydekker, R. 1903 D, 75.
Moodie, R. L. 1911 C, 383.
1915 E, 463.
1916 A, 78.
Owen, R. 1876 E, 45.
Steiner, H. 1921 A, 537.
Thevenin, A. 1906 A, 161.
Williston, S. W. 1910 A, 267.
1911 B, 54.
1912 B, 657.
Zittel and Broili 1911 A, 162.
1923 A, 172, 199, fig. 266.
Zittel, Eastman, etc. 1902 A, 125.

Hylonomus latidens Dawson.

Hay, O. P. 1902 A, 412.
Lambe, L. M. 1904 C, 35, 45 (Hylonemus).
Moodie, R. L. 1914 A, 20.
1916 A, 80, pl. x.
Pennsylvanian (Joggins); Nova Scotia.

Hylonomus lyelli Dawson.

Hay, O. P. 1902 A, 412.
Bell, W. A. 1913 A, 343.
Broili, F. 1908 F, 58.
Lambe, L. M. 1904 C, 35, 45 (Hylonemus).
Mackie, S. J. 1863 F, 439.
Moodie, R. L. 1914 A, 20.
1916 A, 79, pl. ix.
Thevenin, A. 1906 A, 161.
1910 A, 42.
Zittel and Broili 1911 A, 162, fig. 288.
Zittel, Eastman, etc. 1902 A, 125, fig. 209.
Pennsylvanian (Joggins); Nova Scotia.

Hylonomus multidens Dawson.

Hay, O. P. 1902 A, 412.
Lambe, L. M. 1904 C, 35, 45 (Holonemus).
Moodie, R. L. 1914 A, 20.
1916 A, 80.
Pennsylvanian (Joggins); Nova Scotia.

Hylonomus wymani Dawson.

Hay, O. P. 1902 A, 412.
Bell, W. A. 1913 A, 343.
Broili, F. 1908 F, 59 (H. wymanni).
Lambe, L. M. 1904 C, 35, 45 (Holonemus).
Mackie, S. J. 1863 F, 439.
Moodie, R. L. 1914 A, 20.
1916 A, 80.
Pennsylvanian (Joggins); Nova Scotia.

SMILERPETON Dawson. Type *Hylonomus aciedentatus* Dawson.

Hay, O. P. 1902 A, 413.
Moodie, R. L. 1916 A, 81.

Smilerpeton aciedentatum Dawson.

Hay, O. P. 1902 A, 413.
Bell, W. A. 1913 A, 343 (Hylonomus).

Broili, F. 1908 F, 59 (Hylonomus).
Lambe, L. M. 1904 C, 35, 45.
Moodie, R. L. 1914 A, 26.
1916 A, 81, pl. xii, fig. 18.
Pennsylvanian (Joggins); Nova Scotia.

HYLERPETON Owen. Type *H. dawsonii* Owen.

Hay, O. P. 1902 A, 413.
Broili, F. 1908 F, 58.
Gadow, H. 1896 A, 28.
1902 B, 361.
Heilprin, A. 1887 A, 310.
Huxley, T. H. 1863 C, 571.
Moodie, R. L. 1912 D, 327.
1916 A, 82.

Hylerpeton dawsonii Owen.

Hay, O. P. 1902 A, 413.
Bell, W. A. 1913 A, 343.
Lambe, L. M. 1904 C, 35, 45.
Mackie, S. J. 1863 F, 439 (H. dawsoni).
Moodie, R. L. 1914 A, 19.
1916 A, 82, pl. vii (H. dawsoni).
Pennsylvanian (Joggins); Nova Scotia.

Hylerpeton intermedium Dawson.

Hay, O. P. 1902 A, 413.
Lambe, L. M. 1904 C, 35, 45.
Moodie, R. L. 1914 A, 19.
1916 A, 83.
Pennsylvanian (Joggins) Nova Scotia.

Hylerpeton longidentatum Dawson.

Hay, O. P. 1902 A, 413.
Lambe, L. M. 1904 C, 35, 45.
Moodie, R. L. 1914 A, 19.
1916 A, 83, pl. xi.
Pennsylvanian (Joggins); Nova Scotia.

FRITSCHIA Dawson. Type *Hylerpeton curtidentatum* Dawson.

Hay, O. P. 1902 A, 413.
Moodie, R. L. 1916 A, 84.

Fritschia curtidentata Dawson.

Hay, O. P. 1902 A, 413.
Lambe, L. M. 1904 C, 35, 45.
Moodie, R. L. 1914 A, 19.
1916 A, 84, pl. viii.
Pennsylvanian (Joggins); Nova Scotia.

TUDITANIDÆ Cope.

Hay, O. P. 1902 A, 415.
Fritsch, A. 1883 A, 173 (Microbrachidæ).
Gregory, W. K. 1917 B, 313, 318.
Huene, F. 1913 G, 505 (Microbrachidæ).
Moodie, R. L. 1911 H, 241.
1916 A, 85.
Schwarz, H. 1908 B, 91 (Microbrachidæ).

TUDITANUS Cope. Type *T. punctulatus* Cope.

Hay, O. P. 1902 A, 415.
Amalitsky, V. P. 1921 A, 4.
1924 A, 52.
Broili, F. 1904 A, 27.
1908 F, 60.
Case, E. C. 1917 A, 135.
1919 B, 200.
Cope, E. D. 1885 DD, 305.
Gregory, W. K. 1915 D, 332.
Huene, F. 1912 E, 472.
Moodie, R. L. 1909 A, 347.
1909 B, 15, 16.
1916 A, 85.
Schwarz, H. 1908 B, 91.

Tuditanus brevirostris Cope.

Hay, O. P. 1902 A, 415.
Moodie, R. L. 1909 A, 356, pl. lxiv, fig. 4.
1914 A, 27.
1916 A, 88.
Pennsylvanian (Linton); Ohio.

Tuditanus longipes Cope.

Hay, O. P. 1902 A, 415.
Moodie, R. L. 1914 A, 27.
1916 A, 89, fig. 20.
Pennsylvanian (Linton); Ohio.

Tuditanus minimus Moodie.

Moodie, R. L. 1909 E, 56, fig. 10.
1909 B, 17, 23, pl. viii, fig. 2.
1911 H, 242.
1914 A, 27.
1916 A, 91.
Pennsylvanian (Cannelton); Pennsylvania.

Tuditanus punctulatus Cope.

Hay, O. P. 1902 A, 415.
Broili, F. 1904 A, 27.
Pennsylvanian (Linton); Ohio.
See *Isodectes* Cope.

Tuditanus walcotti Moodie.

Moodie, R. L. 1909 B, 16, pl. vi, figs. 1, 2; pl. vii, figs. 1, 2.
1910 A, 368.
1914 A, 27.
1915 A, 192.
1916 A, 93, fig. 21.
Villiers, C. G. S. 1922 A, 218.
Pennsylvanian (Linton); Ohio.

ERPETOSAURUS Moodie. Type *Tuditanus radiatus* Cope.

Moodie, R. L. 1909 A, 347, 348.
Case, E. C. 1917 A, 134.
1919 B, 200.
Hay, O. P. 1902 A, 415 (Tuditanus, in part).
Moodie, R. L. 1909 F, 219.
1916 A, 96, fig. 22.

Erpetosaurus acutirostris Moodie.

Moodie, R. L. 1909 A, 349, pl. lxi, fig. 1.
1914 A, 18.
1916 A, 107, fig. 22.
Pennsylvanian (Linton); Ohio.

Erpetosaurus minutus Moodie.

Moodie, R. L. 1909 B, 21, pl. viii, fig. 1.
1909 A, 347.
1914 A, 18.
1916 A, 104, pl. xx, fig. 1; text-fig. 22.
Pennsylvanian (Cannelton); Pennsylvania.

Erpetosaurus obtusus (Cope).

Hay, O. P. 1902 A, 415 (Tuditanus).
Moodie, R. L. 1909 A, 347, 350, fig. 2.
1914 A, 18.
1916 A, 98.
Pennsylvanian (Linton); Ohio.

Erpetosaurus radiatus (Cope).

Hay, O. P. 1902 A, 415 (Tuditanus).
Broili, F. 1904 A, 27 (Tuditanus).
Moodie, R. L. 1909 A, 347, pl. lxii, fig. 1.
1914 A, 18.
1916 A, 97, pl. xxv, fig. 1; text-fig. 22.
Pennsylvanian (Linton); Ohio.

Erpetosaurus sculptilis Moodie.

Moodie, R. L. 1909 E, 61, figs. 11, 12 (Tuditanus).
1909 A, 347.
1909 B, 22.
1914 A, 18.
1916 A, 105, pl. xviii, fig. 1.
Pennsylvanian (Cannelton); Pennsylvania.

Erpetosaurus tabulatus (Cope).

Hay, O. P. 1902 A, 415 (Tuditanus).
Moodie, R. L. 1908 G, 520, 522, fig. 8 (Tuditanus).
Moodie, R. L. 1909 A, 347; pl. lxii, fig. 2; text-fig. 1; 351, pl. lix, fig. 2; pl. lxiv, fig. 3 (This sp.?).
1909 B, 21.
1909 E, 52, figs. 8, 9 (Tuditanus).
1914 A, 18.
1915 B, pl. 1, fig. 1.
1916 A, 100, pl. xxv, fig. 2; text-fig. 22.
Pennsylvanian (Linton); Ohio.

Erpetosaurus tuberculatus Moodie.

Moodie, R. L. 1909 A, 348, pl. lviii.
1914 A, 18.
1916 A, 109, pl. xxvi, fig. 1.
Pennsylvanian (Linton); Ohio.

Erpetosaurus sp. indet.

Moodie, R. L. 1909 A, 352, pl. lxi, fig. 2. Carboniferous (Linton); Ohio.

ODONTERPETON Moodie. Type *O. triangularis* Moodie.

Moodie, R. L. 1909 B, 19.
Case, E. C. 1917 A, 135.
1919 B, 200.
Moodie, R. L. 1916 A, 110.

Odonterpeton triangularis Moodie.

Moodie, R. L. 1909 B, 19, pl. vi, fig. 3.
1909 F, 217.
1914 A, 23.
1916 A, 110, fig. 22.
Pennsylvanian (Linton); Ohio.

CROSSOTELIDÆ Williston.

Williston, S. W. 1909 D, 131.
Arldt, T. 1912 A, 656.
1916 A, 142 ("crossoteliden").
Case, E. C. 1911 B, 14.
1915 A, 97.
Moodie, R. L. 1912 E, 38.
Williston, S. W. 1910 D, 534.
1916 B, 210.
A family of somewhat uncertain position among the Microsauria.

CROSSOTELOS Case. Type *C. annulatus* Case.

Case, E. C. 1911 B, 14, 70.
1902 B, 63, 65.
1908 C, 579.
1915 A, 132.
Gregory, W. K. 1917 B, 312.
Moodie, R. L. 1911 C, 377.
Schuchert, C. 1910 A, 570.
Williston, S. W. 1909 D, 130.
1910 A, 271, 272, pl. xv, figs. 2, 3.
1910 D, 534.
1916 B, 211, fig. 53.

Crossotelos annulatus Case.

Case, E. C. 1902 B, 63, 65.
Beede, J. W. 1907 A, 139 (C. annulata).
Case, E. C. 1911 B, 70, text-figs. 18, 19.
1915 A, 97.
Moodie, R. L. 1914 A, 17.
Williston, S. W. 1910 D, 534.
Permian (Enid); Oklahoma.

STEGOPIDÆ Moodie.

Moodie, R. L. 1909 E, 79.
Gregory, W. K. 1917 B, 313, 317, 320.
Moodie, R. L. 1916 A, 112.
See the literature cited under *Keraterpeton*.

STEGOPS Moodie. Type *Ceraterpeton divaricatum* Cope.

Moodie, R. L. 1909 E, 79.
Case, E. C. 1917 A, 135.
1919 B, 200.
Gregory, W. K. 1917 B, 320.
1920 A, 223.
Huene, F. 1912 E, 472.
1922 G, 447.
Moodie, R. L. 1916 A, 112.

Stegops divaricata (Cope).

Hay, O. P. 1902 A, 414 (Keraterpeton).
Gregory, W. K. 1915 D, 337.
1920 A, 115, fig. 13.
Moodie, R. L. 1908 G, 520.
1909 E, 79, figs. 21, 22.
1914 A, 26.
1916 A, 113, pl. xxv, fig. 3, text-fig. 23.
Pennsylvanian; Ohio.

UROCORDYLIDÆ Lydekker.

Lydekker, R. 1889, in Nicholson and Lydekker 1889 A, 1025.
Hay, O. P. 1902 A, 414 (Ptyonidæ, part).
Arldt, T. 1909 B, 354 ("urocordyliden").
1912 A, 650.
1916 A, 142 ("urocordyliden," "diceratiden").
Gregory, W. K. 1917 B, 313, 317, 318.
Hancock and Atthey 1869 C, 182 (Urocordylus).
Huene, F. 1922 G, 446 (Nectridei).
Lydekker, R. 1890 A, 196.
Moodie, R. L. 1909 A, 357.
1916 A, 115.

DICERATOSAURUS Jaekel. Type *Tuditanus punctolineatus* Cope.

Jaekel, O. 1903 A, 112.
Abel, O. 1919 A, 255, 299.
Arldt, T. 1909 B, 354 ("diceratosauriden").
Broili, F. 1904 A, 27.
1926 A, 210.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 318.
Huene, F. 1912 E, 472.
1922 G, 447, 453.
Jaekel, O. 1909 A, 196, 198, 210, fig. 1.
Lakjer, T. 1927 A, 192.
Moodie, R. L. 1909 A, 352, 357.
1909 E, 63.
1916 A, 115.
Nopcsa, F. 1923 E, 1052.
Stappenbeck, R. 1905 A, 402.
Watson, D. M. S. 1917 C, 170.
Williston, S. W. 1909 D, 122.
Zittel and Broili 1911 A, 164.
See also the literature cited under *Keraterpeton.*

Diceratosaurus lævis Moodie.

Moodie, R. L. 1909 E, 63, figs. 13, 14.
1914 A, 17.
1915 B, pl. I, fig. 2 (Erpetosaurus).
1916 A, 120, fig. 24.
Pennsylvanian (Linton); Ohio.

Diceratosaurus punctolineatus (Cope).

Hay, O. P. 1902 A, 414 (Keraterpeton).
Abel, O. 1919 A, 300, fig. 224.
Baird, S. F. 1876 A, cci (Ceraterpeton).
Broili, F. 1904 A, 27 (C. "lennicorne" a syn.).
1926 A, 209, fig. 6.
Fuchs, H. 1909 B, 115, fig. 3.
1920 A, 363.
Hay, O. P. 1902 A, 415 (Tuditanus mordax).
Jaekel, O. 1903 A, 112, pls. ii-v (Ceraterpeton recticorne a syn.).
1903 F, 30, fig. 2.
1909 B, 600, fig. 10.
1911 A, 120, figs. 133, 134.
1915 A, 101, 112, fig. 6.
Moodie, R. L. 1908 G, 536.
1909 A, 356, pl. lxv (D. punctolineatus); pl. lxiv, fig. 2 (Tuditanus mordax).
1909 B, 22, 25.
1914 A, 17.
1916 A, 116, pl. xiv, fig. 4; pl. xv; pl. xvi, figs. 1, 5; pl. xxii, fig. 5.
Newberry, J. S. 1874 G, 179 ("Keraterpeton").
Watson, D. M. S. 1913 F, 959.
Pennsylvanian (Linton); Ohio.

Diceratosaurus robustus Moodie.

Moodie, R. L. 1909 E, 67, fig. 15.
1909 A, 355, pl. lxiii, fig. 2.
1914 A, 17.
1916 A, 122, fig. 24.
Pennsylvanian (Linton); Ohio.

EOSERPETON Moodie. Type *Ceraterpeton tenuicorne* (Cope).

Moodie, R. L. 1909 E, 76.
Case, E. C. 1917 A, 134.
1919 B, 200.
Huene, F. 1912 E, 472.
1922 G, 447.
Moodie, R. L. 1909 A. 355, pl. lxiii, fig. 1.
1916 A, 123.
See also the literature cited under *Keraterpeton.*

Eoserpeton tenuicorne (Cope).

Hay, O. P. 1902 A, 414 (Keraterpeton).
Broili, F. 1904 A, 27 (Ceraterpeton "lennicorne," syn. of C. punctolineatum).
Gregory, W. K. 1917 B, 319.
Jaekel, O. 1903 A, 112 (C. "recticorne," syn. of Diceratosaurus punctolineatus).
Merrill, G. P. 1907 A, 12 (Keraterpeton).
Moodie, R. L. 1909 A, pl. lxiii, fig. 1.
1909 B, 23.
1909 E, 76, fig. 20.
1914 A, 18.
1916 A, 123, fig. 25.
Woodward, A. S. 1897 D, 298 (Keraterpeton).
Pennsylvanian (Linton); Ohio.

KERATERPETON Huxley. Type *K. galvani* Huxley.

Hay, O. P. 1902 A, 414.
Abel, O. 1912 F, 218 (Ceraterpeton).
1919 A, 298 (Ceraterpeton).
Arldt, T. 1916 A, 100.
Baird, S. F. 1876 A, cci, 308 (Ceraterpeton).
Broili, F. 1905 A, 13 (Ceraterpeton).
1908 F, 60.
Cope, E. D. 1880 U, 144 (Ceraterpeton).
Cunningham and Boulenger 1912 A, 171.
Depéret, C. 1912 A, 704.
Etheridge, R. 1866 A, 4.
Gadow, H. 1896 A, 23.
1901 B, 288.
Geol. Magazine 1912 A, 519 (Ceraterpeton).

Gill, T. 1881 A, 388 (Ceraterpeton).
Gregory, W. K. 1915 D, 332 (Ceraterpeton).
1917 B, 318.
Hancock and Atthey 1869 C, 184.
Howes, G. B. 1902 A, 525.
Huene, F. 1922 G, 447 (Ceraterpeton).
Hutchinson, H. N. 1910 A, 100, fig. 22 (Ceraterpeton).
Huxley, T. H. 1871 A, 183, pl. xvii.
Jaekel, O. 1903 A, 109 (Ceraterpeton).
1909 A, 210 (Ceraterpeton).
Moodie, R. L. 1915 G, 374 (Ceraterpeton).
1908 G, 520, fig. 7 (Ceraterpeton).
Sewertzoff, A. N. 1908 A, 359 (Ceraterpeton).
Schmalhausen, J. 1917 A, 106 (Ceraterpeton).
Thevenin, A. 1910 A, 40.
Watson, D. M. S. 1913 F, 958 (Ceraterpeton).
1916 E, 86 (Ceraterpeton).
Williston, S. W. 1908 B, 400 (Ceraterpeton).
Woodward, A. S. 1897 D, 293, pl. xii (Ceraterpeton).
Zittel and Broili 1911 A, 164.
Zittel, Eastman, etc. 1902 A, 126.

The American species formerly referred to this genus have become each the type of a new genus, *Stegops*, *Eoserpeton*, and *Diceratosaurus*.

AMPHIBAMIDÆ Moodie.

Moodie, R. L. 1910 C, 233.
Gregory, W. K. 1917 B, 313, 317, 319.
Moodie, R. L. 1911 H, 241.
1912 D, 326.
1916 A, 126.

AMPHIBAMUS Cope. Type *A. grandiceps* Cope.

Hay, O. P. 1902 A, 411.
Arldt, T. 1916 A, 98.
Cope, E. D. 1885 DD, 305.
Huene, F. 1912 E, 472.
Moodie, R. L. 1909 E, 40.
1912 D, 327.
1916 A, 126.
Osborn, H. F. 1916 E, 613, fig. 24.
1917 B, 178, 179, fig.
Sewertzoff, A. N. 1908 A, 359.
Steiner, H. 1921 A, 535.
Zittel and Broili 1911 A, 163.
1923 A, 200.

Amphibamus grandiceps Cope.

Hay, O. P. 1902 A, 411.
Andreæ, A. 1903 B, 442.
Eastman, C. R. 1902 B, 97.
1902 G, 541.
Huene, F. 1913 G, 502, fig. 2 (Amphibamas).
Hutchinson, H. N. 1910 A, 102, fig. 24.
Moodie, R. L. 1908 E, 564, fig. 3.
Moodie, R. L. 1909 E, 40, 82, fig. 24.
1909 F, 218, fig. 1.
1910 A, 368.
1910 C, 233.
1911 H, 242, pl. iii.
1912 A, 277.
1912 D, 324, 326, 343, pl. i, figs. 1, 2; pl. v, fig. 3; pl. vii, fig. 1; pls. xi-xiii.
1914 A, 14.
1915 A, 192.
1916 A, 127, pl. iii, fig. 7; pl. iv, figs. 5, 6; pl. xiv, figs. 1, 2; text-figs. 26-28.
Woodward, A. S. 1897 C, 378.
Pennsylvanian (Mazon Creek); Illinois.

Amphibamus thoracatus Moodie.

Moodie, R. L. 1911 B, 431, fig. 2.
1912 A, 277.
1912 D, 326, 347, pl. v, fig. 2.
1914 A, 14.
1916 A, 131.
Pennsylvanian (Mazon Creek); Illinois.

CEPHALERPETON Moodie. Type *C. ventriarmatum* Moodie.

Moodie, R. L. 1912 D, 327, 349.
1916 A, 132.
Moodie, R. L. 1912 A, 278.
1914 A, 16.
1916 A, 133, pl. iv, fig. 4; text-fig. 29.
Pennsylvanian (Mazon Creek); Illinois.

Cephalerpeton ventriarmatum Moodie.

Moodie, R. L. 1912 D, 326, 350, pl. i, fig. 4; pl. vii, fig. 2.

NYRANIIDÆ Lydekker.

Lydekker, R. 1890 A, 166.
Fritsch, A. 1889 B (1885), 33 (Nyrania).
Moodie, R. L. 1916 A, 135.

ICHTHYERPETON Huxley. Type *I. bradleyæ* Huxley.

Huxley, T. 1866, in Wright and Huxley 1866 A, 168.
Arldt, T. 1916 A, 100.
Etheridge, R. 1866 A, 4.
Gregory, W. K. 1917 B, 313.
Huxley, T. 1867 B, 367 (Ichthyerpeton); 369 (Erpetocephalus).
Lydekker, R. 1890 A, 168 (Ichthyerpetum).
Moodie, R. L. 1916 A, 135.
Zittel, K. A. 1890 A, 381 (Ichthyerpeton, Erpetocephalus).

Ichthyerpeton squamosum Moodie.

Moodie, R. L. 1909 E, 69.
Gregory, W. K. 1917 B, 320.
Moodie, R. L. 1909 B, 24.
1914 A, 20.
1916 A, 135.
Pennsylvanian (Linton); Ohio.

CERCARIMORPHUS Cope. Type *C. parvisquamis* Cope.

Hay, O. P. 1902 A, 417.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 313, 319.
Moodie, R. L. 1915 E, 463.
1916 A, 137.

Cercarimorphus parvisquamis Cope.

Hay, O. P. 1902 A, 417.
Moodie, R. L. 1914 A, 16.
1916 A, 137, pl. xxi, figs. 3, 4; pl. xxiv, figs. 2, 3.
Pennsylvanian (Linton); Ohio.

PTYONIIDÆ Cope.

Hay, O. P. 1902 A, 414.
Abel, O. 1919 A, 304.
Broili, F. 1905 A, 14 (Ceraterpetontidæ).
Gregory, W. K. 1917 B, 313, 317, 319.
Huene, F. 1913 G, 505 (Ptyonidæ).
Huene, F. 1920 C, 211 (Ptyonidæ).
1926 A, 262 (Ptyonidæ).
Moodie, R. L. 1916 A, 139.
Schwarz, H. 1908 A, 324 ("ptyoniden").
1908 B, 79 (Ptyonidæ).

PTYONIUS Cope. Type *P. pectinatus* Cope.

Hay, O. P. 1902 A, 414.
Arldt, T. 1916 A, 101.
Broili, F. 1908 F, 59.
Case, E. C. 1917 A, 135.
1919 B, 200.
Cope, E. D. 1885 DD, 305.
Gregory, W. K. 1917 B, 319.
Hutchinson, H. N. 1910 A, 103, pl. viii.
Jaekel, O. 1903 A, 134.
1909 A, 207, fig. 13.
Moodie, R. L. 1908 F, 255.
1908 G, 520.
1909 B, 24.
1909 C, 120.
1909 E, 38.
1916 A, 139, fig. 30.
1920 B, 469, fig. 5 ("creature").
Osborn, H. F. 1916 E, 613, fig. 24.
1917 B, 179, fig.
Schwarz, H. 1908 B, 82.
Watson, D. M. S. 1913 F, 959.
1917 C, 170.
Zittel, Eastman, etc. 1902 A, 126 (Syn. of Urocordylus).

Ptyonius marshii Cope.

Hay, O. P. 1902 A, 414.
Moodie, R. L. 1914 A, 25.
1916 A, 141.
Pennsylvanian (Linton); Ohio.

Ptyonius nummifer Cope.

Hay, O. P. 1902 A, 414.
Moodie, R. L. 1909 A, 356, pl. lxiii, fig. 3 (P. mummifer, *errore*).
1909 B, 25.
1914 A, 25.
1915 B, pl. 1, fig. 4.
1916 A, 142.
Pennsylvanian (Linton); Ohio.

Ptyonius pectinatus Cope.

Hay, O. P. 1902 A, 414.
Abel, O. 1919 A, 230, figs. 179, 180.
1921 A, 298, fig. 112.
Moodie, R. L. 1909 B, 24, 25, pl. viii, fig. 3.
1914 A, 25.
1916 A, 139, pl. xx, fig. 2.
Schwarz, H. 1908 B, 82, figs. 23, 24, 26.
Pennsylvanian (Linton); Ohio.

Ptyonius serrula Cope.

Hay, O. P. 1902 A, 415.
Moodie, R. L. 1914 A, 25.
1916 A, 142.
Pennsylvanian (Linton); Ohio.

Ptyonius vinchellianus Cope.

Hay, O. P. 1902 A, 415.
Abel, O. 1919 A, 229, fig. 178.
1921 A, 305, fig. 118.
Moodie, R. L. 1914 A, 25.
1916 A, 141.
Schwarz, H. 1908 B, 82, fig. 27 (This species?).
Pennsylvanian (Linton); Ohio.

ŒSTOCEPHALUS Cope. Type *O. amphiuminus* Cope = *O. remex* Cope.

Hay, O. P. 1902 A, 414.
Abel, O. 1921 A, 298.
Arldt, T. 1916 A, 101.
Broili, F. 1908 F, 59.
Case, E. C. 1915 A, 132 (Osteocephalus).
1917 A, 135.
1919 B, 200.
Cope, E. D. 1880 U, 144.
1885 DD, 305.
Gill, T. 1881 A, 388.
Gregory, W. K. 1917 B, 319.
Moodie, R. L. 1908 F, 255.
1909 F, 219.
1916 A, 143, fig. 31.
1920 B, 468, fig. 5 ("creature").
Schwarz, H. 1908 B, 82, 86.
Watson, D. M. S. 1917 C, 170.
Zittel, Eastman, etc. 1902 A, 126 (Syn. of Urocordylus).

Œstocephalus rectidens Cope.

Hay, O. P. 1902 A, 414.
Moodie, R. L. 1914 A, 23.
1916 A, 145.
Pennsylvanian (Linton); Ohio.

Œstocephalus remex Cope.

Hay, O. P. 1902 A, 414.
Abel, O. 1919 A, 229, fig. 177.
Moodie, R. L. 1909 B, 27.

Moodie, R. L. 1914 A, 23.
1916 A, 143.

Schwarz, H. 1908 B, 87, figs. 29, 30.
Pennsylvanian (Linton); Ohio.

THYRSIDIUM Cope. Type *T. fasciculare* Cope.

Hay, O. P. 1902 A, 416.
Arldt, T. 1916 A, 101.
Case, E. C. 1917 A, 135.
1919 B, 200.
Moodie, R. L. 1916 A, 145.
Schwarz, H. 1908 B, 70.
Zittel and Broili 1911 A, 166 (Tyrsidium).

Thyrsidium fasciculare Cope.

Hay, O. P. 1902 A, 416.
Abel, O. 1919 A, 226, 304, fig. 225.
Moodie, R. L. 1909 B, 27.
1914 A, 27.
1916 A, 146.
Schwarz, H. 1908 B, 70, figs. 5-9.
Pennsylvanian (Linton); Ohio.

ICHTHYCANTHIDÆ Moodie.

Moodie, R. L. 1916 A, 171.

Gregory, W. K. 1917 B, 313, 319.

ICHTHYCANTHUS Cope. Type *I. ohiensis* Cope.

Hay, O. P. 1902 A, 422.
Case, E. C. 1911 B, 30.
1917 A, 134.
1919 B, 200.
Moodie, R. L. 1915 A, 509.
1916 A, 171.
Romer, A. S. 1922 B, 564.

Ichthycanthus ohiensis Cope.

Hay, O. P. 1902 A, 422.
Moodie, R. L. 1911 E, 240.
1914 A, 20.
1915 A, 509.

Moodie, R. L. 1916 A, 171.
Pennsylvanian (Linton); Ohio.

Ichthycanthus platypus Cope.

Hay, O. P. 1902 A, 422 (Eryops?).
Case, E. C. 1911 B, 30 (Eryops?).
Moodie, R. L. 1911 E, 240 (Eryops).
1914 A, 19 (To Eryops?).
1915 A, 509, fig. 2.
1915 C, 34.
1916 A, 172, pl. xxiii, fig. 1.
Pennsylvanian (Linton); Ohio.

MOLGOPHIDÆ Cope.

Hay, O. P. 1902 A, 411.
Abel, O. 1919 A, 307 (Phlegethontiidæ, Molgophidæ).
Arldt, T. 1912 A, 650.
1916 A, 101, 143 ("molgophiden").
Gregory, W. K. 1917 B, 313, 317, 319.
Huene, F. 1913 G, 505 (Molgophidæ, Phlegethontiidæ).
1920 C, 211 (Molgophidæ, Phlegetontidæ).
Jaekel, O. 1909 A, 209.
Kingsley, J. S. 1902 B, 327 (Aistopoda).
Moodie, R. L. 1912 D, 326.
1916 A, 147.
Schwarz, H. 1908 B, 73 (Molgophidæ); 74 (Phlegethontiidæ).
Zittel and Broili 1911 A, 165 (Aistopodidæ).
Zittel, Eastman, etc. 1902 A, 127 (Aistopodidæ).

MOLGOPHIS Cope. Type *M. macrurus* Cope.

Hay, O. P. 1902 A, 412.
Broili, F. 1908 E, 298.
1908 F, 59.
Case, E. C. 1917 A, 134.
1919 B, 200.
Jaekel, O. 1903 A, 134.
Moodie, R. L. 1908 F, 255.
1909 B, 27.
1909 E, 38.
1916 A, 147.
Schwarz, H. 1908 B, 73, figs. 10, 11.
Zittel and Broili 1911 A, 166.
1923 A, 203.

Molgophis brevicostatus Cope.

Hay, O. P. 1902 A, 412.
Moodie, R. L. 1909 B, 27.
1914 A, 23.

Moodie, R. L. 1916 A, 148, fig. 32.
Schwarz, H. 1908 B, 73.
Pennsylvanian (Linton); Ohio.

Molgophis macrurus Cope.

Hay, O. P. 1902 A, 412.
Moodie, R. L. 1908 F, 254.
1911 H, 242.
1914 A, 23.
1916 A, 147.
Pennsylvanian (Linton); Ohio.

Molgophis wheatleyi Cope.

Hay, O. P. 1902 A, 412.
Moodie, R. L. 1914 A, 23.
1915 B, pl. 1, fig. 3.
1916 A, 149.
Pennsylvanian (Linton); Ohio.

ERPETOBRACHIUM Moodie. Type *E. mazonensis* Moodie.

Moodie, R. L. 1912 D, 353.
1916 A, 150.

Erpetobrachium mazonensis Moodie.

Moodie, R. L. 1912 D, 326, 353, pl. ii, fig. 2; pl. viii, fig. 3.
1912 A, 278.
1916 A, 150, pl. iii, fig. 3; text-fig. 15.
Pennsylvanian (Mazon Creek); Illinois.

PLEUROPTYX Cope. Type *P. clavatus* Cope.

Hay, O. P. 1902 A, 417.
Case, E. C. 1917 A, 135.
1919 B, 200.
Moodie, R. L. 1909 B, 27.
1916 A, 151.
Schwarz, H. 1908 B, 73.

Pleuroptyx clavatus Cope.

Hay, O. P. 1902 A, 417.
Baird, S. F. 1876 A, cc.
Moodie, R. L. 1909 B, 27.
1914 A, 25.
1916 A, 151, fig. 33.
Udden, J. A. 1902 B, 121.
Pennsylvanian (Linton); Ohio, Iowa.

PHLEGETHONTIA Cope. Type *P. linearis* Cope.

Hay, O. P. 1902 A, 411.
Abel, O. 1919 A, 234, 307, fig. 182.
1921 A, 298 ("phlegothontiiden").
Broili, F. 1908 E, 298.
1908 F, 59.
Case, E. C. 1917 A, 135.
1919 B, 200.
Cope, E. D. 1885 DD, 305.
Moodie, R. L. 1908 F, 255.
1916 A, 153.
Schwarz, H. 1908 B, 74.
Zittel and Broili 1911 A, 166.
1923 A, 203.

Phlegethontia linearis Cope.

Hay, O. P. 1902 A, 411.

Abel, O. 1919 A, 230, fig. 182.
1921 A, 298, fig. 111.
Cope, E. D. 1885 DD, 305.
Moodie, R. L. 1914 A, 24.
1916 A, 154.
Schwarz, H. 1908 B, 74, figs. 12, 13.
Pennsylvanian (Linton); Ohio.

Phlegethontia serpens Cope.

Hay, O. P. 1902 A, 411.
Moodie, R. L. 1914 A, 24.
1916 A, 154.
Schwarz, H. 1908 B, 74.
Pennsylvanian (Linton); Ohio.

SAUROPLEURIDÆ Hay.

Hay, O. P. 1902 A, 419.
Gregory, W. K. 1917 B, 313, 318.
Moodie, R. L. 1911 A, 489.
1916 A, 155.

SAUROPLEURA Cope. Type *S. digitata* Cope.

Hay, O. P. 1902 A, 419.
Broili, F. 1908 F, 59.
Case, E. C. 1917 A, 135.
1919 B, 200.
Cope, E. D. 1885 DD, 305.
Gregory, W. K. 1917 B, 319.
Moodie, R. L. 1909 A, 355, pl. lx, fig. 1.
1909 B, 15.
1914 A, 14.
1916 A, 155.
Steiner, H. 1921 A, 537.

Sauropleura digitata Cope.

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1914 A, 26.
1916 A, 157, pl. xx, fig. 4.
Pennsylvanian (Linton beds); Ohio.

Sauropleura enchodus (Cope).

Hay, O. P. 1902 A, 423 (Anisodexis).
Moodie, R. L. 1911 E, 240 (Anisodexis?)
1914 A, 14 (Sauropleura?).
1916 A, 162, pl. xvi, fig. 4.
Pennsylvanian (Linton beds); Ohio.

Sauropleura foveata (Cope).

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1916 A, 161.
Pennsylvanian (Linton); Ohio.

Sauropleura longidentata Moodie.

Moodie, R. L. 1909 E, 74, figs. 18, 19.
1914 A, 26.
1916 A, 160, pl. xvi, figs. 2, 3.
Pennsylvanian (Linton); Ohio.

Sauropleura newberryi Cope.

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1914 A, 26.
1916 A, 158.
Pennsylvanian (Linton); Ohio.

Sauropleura pauciradiata Cope.

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1916 A, 158, fig. 34.
Pennsylvanian (Linton); Ohio.

Sauropleura scutellata (Newb.).

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1909 A, 355.
1909 B, 26.
Moodie, R. L. 1914 A, 26.
1916 A, 156, pl. xiv, fig. 3; pl. xxi, fig. 5
Pennsylvanian (Linton); Ohio.

CTENERPETON Cope. Type *C. alveolatum* Cope.

Hay, O. P. 1902 A, 415.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 315, 319.
Moodie, R. L. 1909 B, 15.
1916 A, 166.

Ctenerpeton alveolatum Cope.

Hay, O. P. 1902 A, 415.
Merrill, G. P. 1907 A, 9.
Moodie, R. L. 1909 B, 24, pl. x.
1914 A, 17.
1916 A, 166, pl. xix; pl. xxiii, fig. 2.
Pennsylvanian (Linton); Ohio.

SAURERPETON Moodie. Type *Sauropleura latithorax* Cope.

Moodie, R. L. 1909 E, 80.
Case, E. C. 1919 B, 200.
Moodie, R. L. 1909 B, 15.
1916 A, 162.

Saurerpeton latithorax (Cope).

Hay, O. P. 1902 A, 419 (Sauropleura).
Merrill, G. P. 1907 A, 77 (Sauropleura).
Moodie, R. L. 1909 B, 23, pl. lx.
1909 E, 80, fig. 23.
1914 A, 26.
1916 A, 163, pl. xvii; text-fig. 35.
1920 B, 467, fig. 4 ("fellow").
Pennsylvanian (Linton); Ohio.

LEPTOPHRACTUS Cope. Type *L. obsoletus* Cope.

Hay, O. P. 1902 A, 419.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 319.
Moodie, R. L. 1916 A, 167.

Leptophractus dentatus Moodie.

Moodie, R. L. 1916 A, 169, fig. 36.
1914 A, 21 (Name only).
Pennsylvanian (Linton); Ohio.

Leptophractus lineolatus Cope.

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1914 A, 21.
1916 A, 169, pl. xxii, fig. 1.
Pennsylvanian (Linton); Ohio.

Leptophractus obsoletus Cope.

Hay, O. P. 1902 A, 419.
Moodie, R. L. 1914 A, 21.
1916 A, 167.
Pennsylvanian (Linton); Ohio.

SEVEN SUPPOSED MICROSAURIAN GENERA WHOSE RELATIONSHIPS ARE UNCERTAIN

EURYTHORAX Cope. Type *E. sublævis* Cope.

Hay, O. P. 1902 A, 416.
Case, E. C. 1917 A, 134.
1919 B, 200.
Hussakof, L. 1916 A, 127 (=? Sagenodus).
This genus may belong among the fishes.

Eurythorax sublævis Cope.

Hay, O. P. 1902 A, 416.
Hussakof, L. 1916 A, 127 (Sagenodus).
Moodie, R. L. 1914 A, 19.
1916 A, 170, fig. 37.
Pennsylvanian (Linton); Ohio.

AROTUS Cope. Type *Ceratodus hieroglyphus* Cope.

Cope, E. D. 1877 G, 554.
Moodie, R. L. 1908 F, 252.

Arotus hieroglyphus (Cope).

Hay, O. P. 1902 A, 356 (Ceratodus).
Bowen, C. F. 1915 A, 118, 149, 150 (Ceratodus).
Cockerell, T. D. A. 1908 C, 162 (Ceratodus).
Cope, E. D. 1877 G, 554.
Hatcher, J. B. 1905 B, 68 (Ceratodus).
Hussakof, L. 1908 A, 51 (Ceratodus)
Moodie, R. L. 1908 F, 252, fig. 3 (Ceratodus. Referred to the Amphibia).
Osborn, H. F. 1902 I, 11 (Ceratodus).
Upper Cretaceous (Judith River); Montana.

SCAPHERPETON Cope. Type *S. tectum* Cope.

Hay, O. P. 1902 A, 424.
Abel, O. 1919 A, 330.
Arldt, T. 1916 A, 103.
Cope, E. D. 1880 U, 148.
Gilmore, C. W. 1924 A, 68.
Hatcher, J. B. 1905 B, 70.
Hay, O. P. 1910 B, 296.
Moodie, R. L. 1908 F, 255.
Peale, A. C. 1912 A, 746.
Pompeckj, J. F. 1912 A, 340.
Williston, S. W. 1900 B, 394, pl. xxiv, figs. 13, 13*a*.
Zittel and Broili 1923 A, 206.

Scapherpeton excisum Cope.

Hay, O. P. 1902 A, 424.
Bowen, C. F. 1915 A, 120.
Hatcher, J. B. 1905 B, 70.
Moodie, R. L. 1908 F, 253.
1914 A, 26.
Osborn, H. F. 1902 I, 11.
Upper Cretaceous (Judith River); Montana.

Scapherpeton favosum Cope.

Hay, O. P. 1902 A, 424.
Bowen, C. F. 1915 A, 120.
Hatcher, J. B. 1905 B, 70.
Moodie, R. L. 1908 F, 253.
1914 A, 26.
Osborn, H. F. 1902 I, 11.
Upper Cretaceous (Judith River); Montana.

Scapherpeten laticolle Cope.

Hay, O. P. 1902 A, 424.
Bowen, C. F. 1915 A, 120.
Hatcher, J. B. 1905 B, 70.
Moodie, R. L. 1908 F, 253.
1914 A, 26.
Osborn, H. F. 1902 I, 11.
Upper Cretaceous (Judith River); Montana.

Scapherpeton tectum Cope.

Hay, O. P. 1902 A, 424.
Bowen, C. F. 1901 A, 120, 148.
Brown, B. 1907 A, 842.
1914 E, 358, 378.
Gilmore, C. W. 1924 D, 27.
Hatcher, J. B. 1903 D, 372.
1905 B, 69, 70.
Lambe, L. M. 1902 A, 31, pl. iii, figs. 4-8; pl. xv, figs. 16, 17?.
1904 C, 22, 36, 46.
1912 A, 8.
Matthew, W. D. 1916 A, 485 (This species?).
Moodie, R. L. 1908 F, 253.
1914 A, 26.
Osborn, H. F. 1902 I, 11, 16.
Peale, A. C. 1912 A, 754.
Sternberg, C. M. 1924 A, 68.
Williston, S. W. 1902 K, 953.
Upper Cretaceous (Judith River, Hell Creek); Montana: (Belly River); Alberta: (Lance); Wyoming; Saskatchewan.

HEMITRYPUS Cope. Type *H. jordanianus* Cope.

Hay, O. P. 1902 A, 424.
Arldt, T. 1916 A, 103.
Pompeckj, J. F. 1912 A, 340.

Hemitrypus jordanianus Cope.

Hay, O. P. 1902 A, 424.
Bowen, C. F. 1915 A, 120.
Hatcher, J. B. 1905 B, 71.
Moodie, R. L. 1908 F, 253.
1914 A, 19.
Osborn, H. F. 1902 I, 11.
Upper Cretaceous (Judith River); Montana.

AMBLYODON Dawson. Type *A. problematicum* Dawson.

Hay, O. P. 1902 A, 416.
Moodie, R. L. 1916 A, 176, fig. 38.

Amblyodon problematicum Dawson.

Hay, O. P. 1902 A, 416 (A. problematicus).
Lambe, L. M. 1904 C, 35, 45 (A. problematicus).
Moodie, R. L. 1914 A, 14 (A. problematicus).
1916 A, 177.
Pennsylvanian; Nova Scotia.

BRACHYDECTES Cope. Type *B. newberryi* Cope.

Hay, O. P. 1902 A, 413.
Case, E. C. 1917 A, 134.
1919 B, 200.
Moodie, R. L. 1916 A, 175.

Brachydectes newberryi Cope.

Hay, O. P. 1902 A, 413.
Moodie, R. L. 1914 A, 15.
1916 A, 175.
Pennsylvanian (Linton); Ohio.

PROTERPETON Moodie. Type *P. gurleyi* Moodie.

Moodie, R. L. 1916 A, 176.
This genus may belong among the fishes.

Proterpeton gurleyi Moodie.

Moodie, R. L. 1916 A, 176, pl. xxii, fig. 2.
1914 A, 25 (No description).
Pennsylvanian; Illinois.

Suborder GANOCEPHALA Owen.

Owen, R. 1860 A, 155.
Hay, O. P. 1902 A, 417 (Apœcospondyli, part).
Abel, O. 1920 A, 352 (Rhachitomi).
Arldt, T. 1907 D, 652 (Embolomeri); 684 (Temnospondyli).
1916 A, 95 ("sklerokephalen," "ganokephalen," "embolomeren," "rachitomen").
Boulenger, G. A. 1902 F, 383 (Rhachitomi).
Broili, F. 1904 A, 37 (Temnospondyli).
Broom, R. 1910 A, 214 (Temnospondyli).
Case, E. C. 1911 B, 14, 23, 80 (Temnospondyli).
1915 A, 96 (Temnospondyli).
Cope, E. D. 1885 DD, 304 (Ganocephala, Rhachitomi, Embolomeri).
1891 N, 28, 29 (Ganocephali, Rhachitomi, Embolomeri).

Dollo, L. 1884 D, 86 (Rhachitomi, Embolomeri).
1885 D, 629 (Archegosaurus).
Fürbringer, M. 1902 A, 217 (Rhachitomi, Embolomeri).
Gadow, H. 1901 B, 81 (Temnospondyli).
Gaudry, A. 1876 A, 721 (Actinodon).
1878 A, 956 ("reptiles").
Gaupp, E. 1912 A, 565 (Temnospondyli).
Geinitz and Deichmüller 1882 B, 21 (Archegosaurus).
Greene, J. R. 1861 A, 218, 226.
Gregory, W. K. 1915 D, 365 (Temnospondyli).
Haeckel, E. 1868 A, 448.
Huene, F. 1902 A, 14, 68 (Temnospondyli).
1913 B, 379 (Temnospondyli).
1913 G, 506 (Temnospondyli).
1920 C, 211 (Rhachitomi, Embolomeri).
1926 A, 262 (Temnospondyli, Embolomeri).
Jaekel, O. 1896 C, 505 (Archegosaurus).
1904 B, 115 (Temnospondyli).
1906 D, 189 (Temnospondyli).
1909 A, 194 (Temnospondyli).
Lydekker, R. 1885 F, 1-16, pls. i-iv ("labyrinthodonts").
Makowsky, A. 1876 A, 155 (Archegosaurus).
Moodie, R. L. 1908 B, 363 (Temnospondyli).
1908 G, 516, 520 (Temnospondylia).
1909 D, 243 (Temnospondylia, Embolomeri).
1909 E, 39 (Temnospondyli).
1909 F, 220 (Temnospondylia).
1910 C, 234 (Temnospondylia); 241 (Embolomeri).
1911 A, 489 (Apœcospondyli).
1911 E, 236, 240, 242 (Temnospondylia).
1911 H, 243 (Temnospondylia, Embolomeri).
1912 D, 326 (Temnospondylia, Embolomeri).
1915 F, 189, 190 (Temnospondylia).
1915 H, 638 (Temnospondylia).
Moodie, R. L. 1916 A, 5, 178 (Temnospondylia).
Owen, R. 1866 A, 14.
Quenstedt, F. A. 1861 A, 204 (Archegosaurus).
Romer, A. S. 1922 B, 523 (Embolomeri, Rachitomi).
1925 A, 180 (Embolomeri).
1925 B, 456, 461 (Embolomeri); 460 (Rhachitomi).
Stensiö, E. A. 1921 A, 140 (Temnospondyli).
Sushkin, P. P. 1927 A, 270, 310 (Rhachitomi); 316 (Embolomeri).
Terra, P. 1911 A, 225.
Thevenin, A. 1910 A, 4, 16 ("temnospondyles").
Vogt, C. 1854 A, 676 (Archegosaurus).
Watson, D. M. S. 1916 C, 632 ("temnospondyls").
1917 C, 168 (Embolomeri, Rhachitomi).
1919 A, 286, 291 ("temnospondyls"); 286, 292 (Embolomeri, Rhachitomi).
1919 B, 3, 49, 50, 62, 64 (Labyrinthodontia, Embolomeri, Rachitomi).
1926 A, 192 (Rhachitomi, Embolomeri).
Williston, S. W. 1908 B, 400 (Temnospondyli).
1910 D, 534 (Temnospondyli, Embolomeri).
1911 B, 9 (Temnospondyli).
1916 B, 200 (Temnospondyli); 208 (Embolomeri).
1918 A, 75 (Temnospondyli).
1925 A, 1, 6, 21, 25, 27, 112, 195 (Temnospondyli).
Zittel, K. A. 1890 A, 384 (Temnospondyli).
Zittel and Broili 1911 A, 166 (Temnospondyli, Rhachitomi).
1923 A, 173, 186 (Temnospondyli); 186 (Embolomeri); 187 (Rhachitomi).
Zittel, Eastman, etc. 1902 A, 128 (Temnospondyli).

CRICOTIDÆ Cope.

Hay, O. P. 1902 A, 420.
Abel, O. 1919 A, 293.
Arldt, T. 1912 A, 656.
1916 A, 142 ("cricotiden").
Case, E. C. 1911 B, 14, 72, 81, 84.
1915 A, 97.
1915 D, 797.
Cope, E. D. 1891 N, 30.
Gregory, W. K. 1917 B, 313.
Huene, F. 1913 G, 507.
1920 C, 211.
1926 A, 262, 267 (Embolomeri).
Jaekel, O. 1922 A, 25.
Moodie, R. L. 1911 E, 241.
1912 D, 326.
1916 A, 178.
Watson, D. M. S. 1917 C, 169.
Williston, S. W. 1910 D, 534.
1916 B, 208.

CRICOTUS Cope. Type *C. heteroclitus* Cope.

Hay, O. P. 1902 A, 420.
Abel, O. 1919 A, 225, 293, fig. 174.
Arldt, T. 1916 A, 99, 103.
Beede, J. W. 1922 A, 682.
Broili, F. 1904 A, 46, 48.
1908 D, 240.
1913 A, 98.
Broom, R. 1910 A, 214.
1910 C, 476.
1913 F, 563, 564.
Case, E. C. 1900 A, 698.
1908 C, 579.
1911 B, 14, 72, 84, 145, pl. xxv, fig. 3; text-fig. 50.
Case, E. C. 1915 A, 106, 107, 132, 158, 159, pl. xxii, figs. 1-7; text-figs. 33-37.
1915 D, 797.
1919 B, 272.
Cope, E. D. 1878 LL, 482.
1880 U, 145.
Cummins, W. F. 1908 A, 745.
Dames, W. 1899 C, 366.
Dollo, L. 1884 D, 91.
1893 D, 9.
Fürbringer, M. 1904 A, 576.
Gadow, H. 1901 B, 285.
1902 B, 359, 361.
Gaudry, A. 1888 A, 2.

Gregory, W. K. 1917 B, 312.
Huene, F. 1913 G, 503.
1920 F, 460.
Koken, E. 1898 B, 143.
Lydekker, R. 1903 D, 75.
1912 C, 15.
Matthew, W. D. 1909 G, 94, fig. 5.
Mehl, M. G. 1919 A, 52.
Miner, R. W. 1925 A, 183, fig. 20.
Nopcsa, F. 1923 H, 20.
Osborn, H. F. 1916 E, 611, fig. 23.
1917 B, 311.
Oswald, F. 1909 A, 124.
Romer, A. S. 1922 B, *passim*, pls. xxxvii, xliv.
1924 A, 126.
1925 A, 180, 181.
1926 A, 58.
1928 C, 257.
Schuchert, C. 1910 A, 570.
Schwarz, H. 1908 A, 321.
Thevenin, A. 1910 A, 38.
Watson, D. M. S. 1916 C, 632.
1916 E, 85.
1917 C, 169.
1919 A, 294.
1919 B, 50.
1926 A, 241.
Williston, S. W. 1910 A, 271.
1910 D, 534.
1915 A, 578.
1916 B, 209, figs. 50, 51.
1918 A, 76, fig. 1.
1925 A, 97, 98, 119, 143, fig. 76.
Wiman, C. 1910 A, 40.
Woodward, A. S. 1904 D, 175.
Zittel and Broili 1911 A, 171.
1923 A, 187.

Cricotus crassidiscus Cope.

Hay, O. P. 1902 A, 421.
Beede, J. W. 1907 A, 119.
Broom, R. 1913 F, 564, figs. 1, 3.
Case, E. C. 1911 B, 76.
1915 A, 97.
Cope, E. D. 1885 DD, 305, fig. 172.
Cope and Matthew 1915 A, pls. xvi, xvi*a*.
Cummins, W. F. 1908 A, 743.
Huene, F. 1913 B, 367, fig. 51.
Moodie, R. L. 1911 E, 241.
1912 D, 356.
1914 A, 16.
Permian (Wichita); Texas.

Cricotus gibsoni Cope.

Hay, O. P. 1902 A, 421.
Case, E. C. 1900 A, 709, pl. i, fig. 15.
1911 B, 75.
1915 A 97.
Cope and Matthew 1915 A, pl. iii, fig. 17.
Moodie, R. L. 1911 E, 241.
1914 A, 16 (C. gibsonii).
Pennsylvanian (Upper); Illinois.

Cricotus heteroclitus Cope.

Hay, O. P. 1902 A, 421.
Beede, J. W. 1907 A, 119.
Broom, R. 1913 F, 564 (C. discophorus).
Case, E. C. 1900 A, 708, pl. i, figs. 12-14.
1911 B, 75, 145, 146, pl. xxiv, figs. 1, 2; pl. xxv, figs. 1, 2, 4; text-figs. 50, 51.
1915 A, 97, 157, 159, pl. xx, fig. 1; text-fig. 32.
Cope, E. D. 1891 N, 31, fig. 14.
Cope and Matthew 1915 A, pl. iii, figs. 15, 16.
Dames, W. 1899 C, 366.
Gadow, H. 1901 B, 287.
Moodie, R. L. 1911 E, 241.
1912 D, 326.
1914 A, 16.
Williston, S. W. 1897 K, 395.
Pennsylvanian (Upper); Illinois.

Cricotus hypantricus Cope.

Hay, O. P. 1902 A, 421.
Beede, J. W. 1907 A, 119.
Broom, R. 1913 F, 566, fig. 2.
Case, E. C. 1911 B, 74, 146, text-fig. 51.
1915 A, 97, 159.
Cummins, W. F. 1908 A, 741.
Gadow, H. 1896 A, 41, fig. 42.
Moodie, R. L. 1911 E, 241.
1914 A, 17.
Permian (Wichita); Texas: (Enid); Oklahoma: (Garrison?); Kansas.

Cricotus sp. indet.

Undetermined remains have been mentioned as follows:
Hay, O. P. 1902 A, 421.
Case, E. C. 1900 A, 709, pl. v, figs. 13-16. (Permian; Illinois.)
1902 B, 63. Permian; Oklahoma.
Moodie, R. L. 1914 A, 17. Carboniferous (Upper); Illinois.
Romer, A. S. 1927 A, 232. Permian (Wichita); Texas.
Wegeman, C. H. 1915 A, 25. Permian (Wichita); Oklahoma.

Cricotillus Case. Type *C. brachydens* Case.

Case, E. C. 1902 B, 63.
Arldt, T. 1916 A, 99.
Case, E. C. 1911 B, 14, 78.
Huene, F. 1920 F, 461.
Romer, A. S. 1925 A, 181.
Schuchert, C. 1910 A, 570.
Williston, S. W. 1910 A, 281.
1910 D, 534.

Cricotillus brachydens Case.

Case, E. C. 1902 B, 63, 65.
Beede, J. W. 1907 A, 139.
Case, E. C. 1911 B, 78, text-fig. 20.
1915 A, 97.
Moodie, R. L. 1911 E, 240.
1914 A, 16.
Williston, S. W. 1910 D, 534.
Permian (Enid); Oklahoma.

CHENOPROSOPUS Mehl. Type *C. milleri* Mehl.

Mehl, M. G. 1913 A, 11.
Abel, O. 1919 A, 310.
Case, E. C. 1915 A, 106, 133.
Huene, F. 1920 F, 461.
Williston, S. W. 1915 A, 578.
1916 B, 209.
1918 B, 93.
Zittel and Broili 1923 A, 192.

Chenoprosopus milleri Mehl.

Mehl, M. G. 1913 A, 11, figs. 4-7.
Abel, O. 1919 A, 311, fig. 231.
Case, E. C. 1915 A, 97.
Lydekker, R. 1914 A, 650.
Williston, S. W. 1918 B, 93, fig. 7 ("Chenoprosopus").
Williston and Case 1913 A, 6.
Permian; New Mexico.

SPONDYLERPETON Moodie. Type *S. spinatum* Moodie.

Moodie, R. L. 1912 D, 355.
Gregory, W. K. 1917 B, 312.
Moodie, R. L. 1916 A, 178.
Watson, D. M. S. 1917 C, 169.

Spondylerpeton spinatum Moodie.

Moodie, R. L. 1912 D, 326, 355, pl. viii, figs. 1, 2, pl. ix, fig. 1.

Case, E. C. 1915 D, 797.
Moodie, R. L. 1911 E, 240 (No description).
1912 A, 278.
1912 D, 326.
1914 A, 26.
1916 A, 179, pl. iv, figs. 1, 2, text-fig. 39.
Pennsylvanian (Mazon Creek); Illinois.

MACRERPETIDÆ Moodie.

Moodie, R. L. 1909 A, 354.
Gregory, W. K. 1917 B, 313 (Macrepetidæ).

Moodie, R. L. 1915 F, 189.
1916 A, 181.

MACRERPETON Moodie. Type *Tuditanus huxleyi* Cope.

Moodie, R. L. 1909 E, 72.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 312.
Moodie, R. L. 1909 A, 347.
1916 A, 182.
Watson, D. M. S. 1919 B, 21.

Macrerpeton deani Moodie.

Moodie, R. L. 1916 A, 184, pl. xxi, figs. 1, 2; text-fig. 40 (pl. xxii, fig. 4. This species?).
1914 A, 21 (Name only).
Pennsylvanian (Linton); Ohio.

Macrerpeton huxleyi (Cope).

Hay, O. P. 1902 A, 415 (Tuditanus).
Moodie, R. L. 1909 A, 347, 354, pl. lix, fig. 1.
1909 B, 28.
1909 D, 239.
1909 E, 72, fig. 17.
1909 F, 217.
1911 A, 490.
1911 H, 239.
1914 A, 21.
1916 A, 182, pl. xxvi, fig. 2.
Pennsylvanian (Linton); Ohio.

ANTHRACOSAURIDÆ Cope.

Cope, E. D. 1875 X, 10.
Hay, O. P. 1902 A, 421 (Anthracosauridæ); 417 (Dendrerpetontidæ).
Bailey, W. H. 1876 A, 62 (Anthracosaurus).
Gregory, W. K. 1917 B, 313.
Hancock and Atthey 1869 C, 184 (Anthracosaurus).
1869 D, 270 (Anthracosaurus).
Lydekker, R. 1890 A, 157.
Moodie, R. L. 1916 A, 48, 185.
Watson, D. M. S. 1917 C, 168.
Wright and Huxley 1866 A, 169 (Anthracosaurus).
Zittel, Eastman, etc. 1902 A, 131 (Gastrolepidotidæ).
Zittel and Broili 1911 A, 171 (Anthracosaurus).

EOSAURUS Marsh. Type *E. acadianus* Marsh.

Hay, O. P. 1902 A, 421.
Arldt, T. 1916 A, 99.
Brauns, D. 1890 A, 202.
Gregory, W. K. 1917 B, 320.
Moodie, R. L. 1913 B, 32.
1915 F, 189.
Watson, D. M. S. 1919 B, 21.
Williston, S. W. 1909 A, 394.
1910 F, 599.
1925 A, 94.
Zittel and Broili 1911 A, 171.
1923 A, 187.
Zittel, Eastman, etc. 1902 A, 132.

Eosaurus acadianus Marsh.

Hay, O. P. 1902 A, 421.
Agassiz, L. 1862 A, 138 ("sauroid remains").
Bell, W. A. 1913 A, 341, 343.
Lambe, L. M. 1904 C, 14, 20, 35, 46.
Lucas, F. A. 1902 B, 117, figure.
Mackie, S. J. 1863 F, 440.
Moodie, R. L. 1908 B, 362 (E. canadensis).
1909 F, 217.
1910 B, 721 (E. canadensis).
1911 A, 489, 495 (E. canadensis).
1911 H, 239.
1914 A, 18.
1916 A, 187, fig. 41.
Pennsylvanian (Joggins); Nova Scotia.

EOBAPHETES Moodie. Type *Erpetosuchus kansensis* Moodie.

Moodie, R. L. 1916 A, 189.
Gregory, W. K. 1917 B, 312.
Moodie, R. L. 1915 F, 189.
Watson, D. M. S. 1912 A, 8 (Erpetosuchus).
1917 C, 168 (Erpetosuchus).
1919 B, 21 (Erpetosuchus).

Eobaphetes kansensis Moodie.

Moodie, R. L. 1911 A, 491, figs. 1-4 (Erpetosuchus).
Gaupp, E. 1912 A, 566 (Erpetosuchus).
Moodie, R. L. 1914 A, 18 [E. (Erpetosuchus)].
1916 A, 190, fig. 42.
Watson, D. M. S. 1912 A, 8 (Erpetosuchus).
Pennsylvanian; Kansas.

BAPHETES Owen. Type *B. planiceps* Owen.

Hay, O. P. 1902 A, 418.
Arldt, T. 1916 A, 99 (Taphetes).
Moodie, R. L. 1915 F, 189.
1916 A, 186.
Owen, R. 1860 E, 184.
Watson, D. M. S. 1912 A, 8.
1917 C, 168.
1919 B, 21.
1926 A, 198, fig. 4.
Zittel and Broili 1911 A, 171.
1923 A, 187.

Baphetes minor Dawson.

Hay, O. P. 1902 A, 418.
Dawson, J. W. 1870 B, 271.

Lambe, L. M. 1904 C, 20, 35, 45.
Moodie, R. L. 1914 A, 15.
1916 A, 187.
Pennsylvanian (Joggins); Nova Scotia.

Baphetes planiceps Owen.

Hay, O. P. 1902 A, 418.
Lambe, L. M. 1904 C, 20, 35, 45.
Mackie, S. J. 1863 F, 436.
Moodie, R. L. 1908 E, 563 (Raphetes; err. typ.).
1911 A, 489, 495.
1914 A, 15.
1916 A, 186, pl. xxii, fig. 6.
Owen, R. 1860 E, 184.
Pennsylvanian (Joggins); Nova Scotia.

DENDRERPETON Owen. Type *D. acadianum* Owen.

Hay, O. P. 1902 A, 417.
Arldt, T. 1912 A, 650.
Brauns, D. 1890 A, 161.
Broili, F. 1904 A, 37.
1908 F, 60.
Dawson, J. W. 1888 A, 393.
Depéret, C. 1907 B.
1912 A, 704.
Gregory, W. K. 1917 B, 312.
Heilprin, A. 1887 A, 310.
Huxley, T. H. 1863 C, 571.
Moodie, R. L. 1912 D, 327.
1916 A, 192.
Owen, R. 1876 E, 45.
Wills, L. J. 1916 A, 17.
Zittel and Broili 1923 A, 200.

Dendrerpeton acadianum Owen.

Hay, O. P. 1902 A, 418.

Bell, W. A. 1913 A, 343.
Broili, F. 1908 F, 60.
Dawson, J. W. 1854 A, 22.
Jaeger, G. 1856 A, 959.
Lambe, L. M. 1904 C, 20, 35, 45.
Lull, R. S. 1918 B, 202.
Mackie, S. J. 1863 F, 436, 437.
Moodie, R. L. 1916 A, 192, pl. vi.
Pennsylvanian (Joggins); Nova Scotia.

Dendrerpeton oweni Dawson.

Hay, O. P. 1902 A, 418.
Bell, W. H. 1913 A, 343.
Lambe, L. M. 1904 C, 20, 35, 45.
Mackie, S. J. 1863 F, 438.
Moodie, R. L. 1914 A, 17 (D. owenii).
1916 A, 194, pl. xiii.
1920 B, 466, fig. 3 ("4-footed animal").
Pennsylvanian (Joggins); Nova Scotia.

PLATYSTEGOS Dawson. Type *P. loricatum* Dawson.

Hay, O. P. 1902 A, 418.
Moodie, R. L. 1916 A, 197.
A genus of somewhat uncertain position.

Platystegos loricatum Dawson.

Hay, O. P. 1902 A, 418.
Lambe, L. M. 1904 C, 20, 35, 45.
Moodie, R. L. 1914 A, 24.
1916 A, 197.
Pennsylvanian (Joggins); Nova Scotia.

ERYOPIDÆ Cope.

Hay, O. P. 1902 A, 421.
Abel, O. 1919 A, 277.
Arldt, T. 1907 D, 678 (Rhachitomi).
1909 B, 353 ("eryopiden").
1912 A, 656 (Eryopidæ, Rhachitomi).
1916 A, 142 ("eryopiden").
Broili, F. 1904 D, 582 ("rhachitomen").
1913 A, 98.

Case, E. C. 1911 B, 14, 23, 80, 81.
1915 A, 96.
Cope, E. D. 1891 N, 29.
Dollo, L. 1884 D, 88.
Huene, F. 1913 G, 506.
1920 C, 211 (Eryopinæ).
Jaekel, O. 1909 A, 204.
1922 A, 23.

Lydekker, R. 1885 F, 9, 10 (Actinodontidæ); 9 (Rhachitomi).
Moodie, R. L. 1909 D, 243 (Rhachitomi).
1910 C, 240, 242 (Eryopidæ); 240 (Rhachitomi).
1916 A, 180.
Watson, D. M. S. 1919 B, 2, 64 (Rhachitomi, Eryopidæ).
Williston, S. W. 1910 D, 535 (Eryopidæ, Rhachitomi).
1911 B, 9.
1916 B, 200 (Eryopidæ, Rhachitomi).
1918 A, 75 (Rhachitomi).
Zittel and Broili 1911 A, 168 (Rhachitomi).
1923 A, 187.

Eryops Case. Type *E. megacephalus* Cope.

Hay, O. P. 1902 A, 421.
Abel, O. 1912 F, 671.
1919 A, 223, 256, figs. 172, 188, 194, 206.
1921 A, 250.
Adams, L. A. 1919 A, 128, pl. xii.
Amalitsky, V. P. 1921 B, 9.
1924 A, 58.
1924 B, 72.
Anonymous 1912 A, 519.
Arldt, T. 1916 A, 102.
Beasley, W. L. 1907 A, 368.
Boas, J. E. V. 1914 C, 239, fig. 5.
Boule, M. 1891 A, 8.
Boulenger, G. A. 1901 B, 401.
Branson, E. B. 1905 B, 568, 595, 610, figs. 5, 11-14, 16, 18, 19.
Branson and Mehl 1928 C, 488.
Broili, F. 1904 A, 28, 49, 62.
1904 B, 484.
1904 D, 579.
1908 D, 236.
1913 C, 529.
1913 D, 351.
1917 A, 572.
1926 A, 209, figs. 5, 9.
Broom, R. 1901 A, 185.
1903 E, 136.
1904 B, 90.
1908 A, 1058.
1908 D, 373.
1910 C, 476.
1911 B, 79.
1913 E, 531.
1913 F, 563, 579.
1913 H, 73.
1913 I, 355.
1915 C, 30.
1917 A, 977.
1926 A, 263.
Bulman and Whittard 1926 A, 577.
Case, E. C. 1902 A, 48.
1903 C, 394, fig. 1.
1908 B, 235, pl. lix, figs. 5-8; text-figs. 1-3.
1908 C, 576, 579.
1908 D, 567.
1911 B, 14, 23, 81, 91, 93, pl. v, figs. 3, 4; pl. viii, fig. 2; pl. xv, fig. 10; text-fig. 26.
1915 A, 126, 165, pl. xxiii, figs. 1-4.
1924 B, 6.
Cope, E. D. 1880 U, 145 (Rhachitomus).
Credner, H. 1893 A, 673, 688.
Cummins, W. F. 1908 A, 745.
Dollo, L. 1893 D, 9.
Douthitt, H. 1917 A, 237.
Drevermann, F. 1914 B, 628.
1920 A, 89, 100, 104.
Eastman, C. R. 1917 B, 656.
Eastman, Gregory, and Matthew 1917 A, 118.
Emery, C. 1901 A, 672, fig. 12.
Frassetto, F. 1915 A, 52.
Fuchs, H. 1912 B, 89.
Fürbringer, M. 1904 A, 576.
Gadow, H. 1896 A, 21, 22, 51 (Syn. of Rhachitomus).
1901 B, 285.
1902 B, 359, 361.
Gaudry, A. 1888 A, 2.
1896 A, 59.
Gaupp, E. 1912 A, 565.
Gregory, W. K. 1910 A, 439, 440.
1911 A, 508.
1913 D, 807.
1915 D, 336, fig. 11.
1917 B, 312.
1920 A, 223.
Gregory and Camp 1918 A, 547.
Gregory, Miner and Noble 1923 A, 279.
Gregory and Noble 1924 A, 439, fig. 1.
Hanson, F. B. 1920 B, 335, 337.
Heilprin, A. 1887 A, 155.
Hitchcock and Grier 1927 A, 192.
Hoepen, E. C. N. 1915 A, 140, 142.
Huene, F. 1902 A, 8.
1909 D, 332.
1912 D, 98, figs. 2-8.
1913 B, 379.
1913 G, 502.
1922 D, 280.
1922 G, 404, 448, 453.
Jaekel, O. 1903 A, 118.
1908 B, 467.
1919 A, 91.
1922 A, 24.
Kehrer, F. A. 1896 A, 353.
Kingsley, J. S. 1925 A, 120, 122, 246, figs. 126, 128, 259.
Koken, E. 1898 B, 143.
Lakjer, T. 1927 A, figs. 82, 115.
Lucas, F. A. 1902 B, 118, figure.
Lydekker, R. 1885 F, 10 (Eryops); 10, 11 (Rhachitomus).
1903 D, 75.
1912 C, 15.
Martin, H. T. 1922 B, 104.
Matthew, W. D. 1909 G, 92, fig. 2.
1911 D, 197, figs.
Mehl, M. G. 1919 A, 52.
Miner, R. W. 1925 A, *passim*, 23 figs.
Moodie, R. L. 1910 C, 243.
1911 H, 239.
1915 G, 370.
1915 J, 318.
1916 A, 180.
Morton, D. J. 1926 A, 413.

Neumayer, L. 1904 A, 121.
Nopcsa, F. 1923 E, 1047.
1926 A, 635.
Osborn, H. F. 1916 E, 612, figs. 22, 23.
1917 B, 312.
Perrier, E. 1920 A, 281.
Raymond, P. E. 1907 A, 836.
Rogers, A. F. 1924 A, 546.
Romer, A. S. 1922 B, 525, 564, pls. xxxiii, xxxvii, xliv, xlvi.
1924 A, 122, 124, figs. 1-3.
1925 B, 450.
1926 A, 59.
1928 C, 257, 258.
Schmalhausen, J. J. 1908 A, 342.
1917 A, 96, 107, fig. L.
1917 B, 135.
Schuchert, C. 1910 A, 570.
1915 A, 802.
Schwarz, H. 1908 A, 320.
Sewertzoff, A. N. 1908 A, 387.
Steiner, H. 1921 A, 534, 535.
1922 A, 331, 340.
Steinmann, G. 1907 A, 426, fig. 750.
1908 A, 214.
Stensiö, E. A. 1921 A, 141.
Sternberg, C. H. 1909 C, 217, 227.
1917 A, 184.
Stromer, E. 1913 A, 61.
Sushkin, P. P. 1927 A, 274, 280, 314, figs. 5, 6, 13, 14.
Thevenin, A. 1910 A, 38, fig. 15.
Versluys, J. 1912 B, 568, fig. a.
Villiers, C. G. S. 1922 A, 218.
Watson, D. M. S. 1912 A, 9.
1912 B, 584.
1913 C, 341.
1913 F, 956, 957.
1914 F, 780.
1914 G, 1004.
1914 H, 1014.
1916 B, 45.
1916 C, 612, 630, figs. 1-4.
1916 E, 83.
1917 A, 979.
1917 B, 2.
1919 A, 286.
1919 B, 3, 23, 49, 51, 64, figs. 1, 11, 29, 30.
1921 C, 72, 73.
1926 A, 202.
Whittard, W. F. 1928 A, 263.
Williston, S. W. 1909 B, 641.
1910 D, 535.
1910 F, 596.
1911 D, 379.
1914 A, 31, figs. 14, 24.
1914 C, 57, 62, fig. 1.
1914 E, 121.
1915 A, 578.
1915 B, 253.
1916 A, 173.
1916 B, 201, figs. 38-40.
1918 A, 76, figs. 1, 2.
1918 B, 87, pl. iii, text-figs. 14, 16.
1925 A, 24, 97, 126, 136, 168, 170, 195, figs. 10, 25, 76, 108, 136.
Wills, L. J. 1916 A, 5, fig. 1.
Wiman, C. 1921 A, 27.
1922 A, 118.
1923 B, 274.
Zittel and Broili 1911 A, 168.
1923 A, 172, 187, fig. 267.
Zittel, Eastman, etc. 1902 A, 131.

Eryops erythroliticus Cope.

Hay, O. P. 1902 A, 422.
Beede, J. W. 1907 A, 118.
Cummins, W. F. 1908 A, 744.
Moodie, R. L. 1911 E, 252 (=E. megocephalus?).
1916 A, 181.
A doubtful species.
Permian; Texas.

Eryops latus Case.

Case, E. C. 1903 C, 394, fig. 2.
Ameghino, F. 1909 A, 42, fig. 26.
Case, E. C. 1911 B, 31.
1915 A, 96.
Moodie, R. L. 1911 E, 252.
1914 A, 18.
Stappenbeck, R. 1905 A, 405.
Williston, S. W. 1909 B, 657, fig. 7.
1910 D, 535.
Permian (Wichita, Clear Fork); Texas.

Eryops megacephalus Cope.

Hay, O. P. 1902 A, 422.
Abel, O. 1919 A, 235, figs. 185, 187, 190, 205.
1920 A, 350.
Beede, J. W. 1907 A, 119, 139 (E. megacephalus, Rhachitomus valens).
Boas, J. E. V. 1914 C, 241, fig. 8.
Broili, F. 1904 D, 581, figs. 3, 8, 9.
1908 D, 235, fig.
1908 F, 51.
1917 A, 572, figs. 16, 17.
1927 A, 187 (E. macrocephalus).
Broom, R. 1913 F, 579, figs. 11-16, 18.
Case, E. C. 1902 B, 63, 65.
1903 C, 394.
1911 B, 28, 29, 92, 109, pl. iv, fig. 2; pls. vi, vii; pl. viii, figs. 1, 3, 4; pls. ix, x; text-figs. 24, 25, 27-33, 40.
1912 B, 681.
1915 A, 96, 126, 157, 165; pl. xx, fig. 2, text-fig. 38.
Cope, E. D. 1885 DD, 307, figs. 170, 171.
1885 EE, 613, fig. 3.
1885 FF, 794, fig. 5.
Cope and Matthew 1915 A, pls. x-xiii.
Cossmann, M. 1900 A, 51.
Cummins, W. F. 1908 A, 742.
Gadow, H. 1896 A, 41, fig. 41.
1901 B, 286.
Gaudry, A. 1893 A, 21.
Gould, C. W. 1901 A, 339.
Gregory, W. K. 1911 A, 508.
1915 D, 368, fig. 15.
1920 A, 116, fig. 20.
1922 A, 11, fig. 6.
Gregory, Miner, and Noble 1923 A, 280, figs. 1, 3.
Heilmann, G. 1926 A, 46, fig. 32.
Huene, F. 1902 A, 8, figs. 3, 15.

Huene, F. 1912 D, 98, fig. 1.
1913 B, 318, figs. 1-6.
1922 G, 456, fig. 44.
Hutchinson, H. N. 1910 A, 99, fig. 20 (E. macrocephalus).
Jaekel, O. 1922 A, 12 (E. megalocephalus).
Koken, E. 1900 C, 144.
Lakjer, T. 1927 A, 192, fig. 70.
Miner, R. W. 1925 A, 150, 155, figs. 1, 4, 102.
Moodie, R. L. 1908 G, 524, fig. 11.
1911 E, 240.
1914 A, 19.
Schuchert, C. 1910 A, 570.
Schwarz, H. 1908 A, 320.
Sternberg, C. H. 1903 E, 94.
1909 C, 251.
Thevenin, A. 1910 A, 27.
Watson, D. M. S. 1926 A, 196, fig. 1.
Wegeman, C. H. 1915 A, 26.
Wegner, R. N. 1922 A, 462.
Wiman, C. 1914 A, 2, figs. 7, 8 (E. megalocephalus).
1916 B, 219.
Zittel and Broili 1911 A, 108, fig. 299.
1923 A, 178, figs. 275, 286, 290, 291.
Zittel, Eastman, etc. 1902 A, 130, fig. 219.
Permian (Clear Fork, Wichita); Texas: (Enid); Oklahoma: Pennsylvanian? (Upper); Pennsylvania).

Eryops reticulatus Cope.

Hay, O. P. 1902 A, 422.
Case, E. C. 1911 B, 30, 109, text-fig. 40.
Case, E. C. 1915 A, 96.
Cummins, W. F. 1908 A, 744.
Douthitt, H. 1917 A, 239, 241 (=? Eryopsoides grandis?).
Moodie, R. L. 1911 E, 240.
1914 A, 19.
Williston and Case 1913 A, 6.
Permian; New Mexico.

Eryops willistoni Moodie.

Moodie, R. L. 1911 E, 243, pls. xli-liv.
Case, E. C. 1915 A, 96.
Moodie, R. L. 1911 E, 243.
1913 A, 248.
1914 A, 19.
Williston, S. W. 1912 C, 3.
Williston and Case 1912 A, 3.
Permian (Enid); Oklahoma.

Eryops sp. indet.

Undetermined remains of *Eryops* have been reported as follows:
Case, E. C. 1916 B, 709. Permo-Carboniferous; New Mexico.
Cummins, C. F. 1908 A, 740. Permian; Texas.
Moodie, R. L. 1916 A, 181, pl. xviii, fig. 2. Pittsburgh Red Shale; Pennsylvania.
Romer, A. S. 1927 A, 232. Permian; Texas.
Watson, D. M. S. 1919 B, 3, fig. 1. Permian; Texas.
Wegeman, C. H. 1915 A, 25. Permian (Wichita); Oklahoma.

Eryopsoides Douthitt. Type *Ophiacodon grandis* Marsh.

Douthitt, H. 1917 A, 237, 241.
This is a genus of doubtful standing.

Eryopsoides grandis (Marsh).

Hay, O. P. 1902 A, 434 (Ophiacodon).
Case, E. C. 1915 A, 96 (Eryops).
Douthitt, H. 1917 A, 239, 241 (Ophiacodon; type of Eryopsoides).
Mehl, M. G. 1912 C, 409 (Ophiacodon).
Moodie, R. L. 1914 A, 18 (Eryops).
Williston, S. W. 1911 B, 10 (Eryops).
1911 D, 379 (Ophiacodon).
Williston and Case 1913 A, 6 (Eryops).
1913 B, 37 (Eryops).
Permian (Garrison?); New Mexico.

Parioxys Cope. Type *P. ferricolus* Cope.

Cope, E. D. 1878 B, 521.
Hay, O. P. 1902 A, 421 (Eryops, in part).
Case, E. C. 1911 B, 14, 31, 81 (Eryops).
1915 A, 127 (Parioxys).
Cope, E. D. 1878 U.
Watson, D. M. S. 1919 B, 4, 64.
Williston, S. W. 1916 B, 201.

Parioxys anatinus (Broom).

Broom, R. 1913 F, 591, figs. 19, 20 (Eryops).
Abel, O. 1919 A, 276, fig. 204 (Eryops).
Case, E. C. 1911 B, 96, pl. viii, fig. 2; text-fig. 26 (Eryops sp.).
Watson, D. M. S. 1919 B, 4 (To Parioxys?). Permian; Texas.

Parioxys ferricolus Cope.

Hay, O. P. 1902 A, 422 (Eryops).
Beede, J. W. 1907 A, 119 (Eryops).
Case, E. C. 1911 B, 32, 104, text-fig. 4.
1915 A, 96 (P. ferricolis).
Cummins, W. F. 1908 A, 744 (Eryops).
Moodie, R. L. 1911 E, 240 (Eryops).
1914 A, 24.
Permian (Clear Fork); Texas.

Anisodexis Cope. Type *A. imbricarius* Cope.

Hay, O. P. 1902 A, 423.
Broili, F. 1904 A, 35, 47, 49.
Case, E. C. 1911 B, 14, 33, 81.
1915 A, 127.
Cummins, W. F. 1908 A, 745.
Lydekker, R. 1885 F, 10.
Schuchert, C. 1910 A, 570.
Williston, S. W. 1910 A, 271.
1916 B, 201.

Anisodexis imbricarius Cope.

Hay, O. P. 1902 A, 423.
Beede, J. W. 1907 A, 119.
Case, E. C. 1911 B, 33, 104.
Case, E. C. 1915 A, 96.
Cummins, W. F. 1908 A, 743.
Moodie, R. L. 1911 E, 240.
1914 A, 14.
Permian (Clear Fork); Texas.

ACHELOMIDÆ Watson.

Watson, D. M. S. 1919 B, 65.

ACHELOMA Cope. Type *A. cumminsi* Cope.

Hay, O. P. 1902 A, 423.
Broili, F. 1904 A, 35, 47, 49.
1905 A, 16, 47.
1913 A, 98.
Case, E. C. 1911 B, 14, 34, 82, 104, 136.
1915 A, 127.
Cummins, W. F. 1908 A, 745.
Lydekker, R. 1885 F, 10, 11.
Romer, A. S. 1922 B, 555, fig. 5.
Schuchert, C. 1910 A, 570.
Watson, D. M. S. 1919 B, 7, 65.
Williston, S. W. 1909 B, 658.
1909 D, 129.
1910 A, 271.
1910 D, 533.
1916 B, 202.
Zittel and Broili 1923 A, 189.

By Williston this genus is referred with doubt to the Trematopsidæ.

Acheloma casei Broili.

Broili, F. 1913 A, 98, pl. ix, figs. 1, 2 (Acheloma?).
Case, E. C. 1915 A, 96.
Permian (Clear Fork); Texas.

Acheloma cumminsi Cope.

Hay, O. P. 1902 A, 423.
Beede, J. W. 1907 A, 119.
Broili, F. 1913 A, 98.
Case, E. C. 1911 B, 35, 104, pl. xi, text-figs. 34, 35.
1915 A, 96.
Cummins, W. F. 1908 A, 743.
Huene, F. 1913 B, 370, fig. 55.
Mehl, M. G. 1912 C, 409.
Moodie, R. L. 1911 E, 240.
1914 A, 14.
Permian (Clear Fork); Texas.

TREMATOPSIDÆ Williston.

Williston, S. W. 1910 A, 278.
Abel, O. 1919 A, 278.
Arldt, T. 1916 A, 142 ("trematophiden").
Broili, F. 1913 A, 98.
Case, E. C. 1911 B, 66, 81, 83, 130; 14 (Trematosauridæ).
1915 A, 97.
Eastman, C. R. 1912 C, 657.
Huene, F. 1913 G, 507.
Huene, F. 1920 C, 211.
Jaekel, O. 1922 A, 23.
Mehl, M. G. 1926 A, 206.
Nopcsa, F. 1923 H, 136 ("trematopsiden").
Watson, D. M. S. 1919 B, 65.
Williston, S. W. 1910 D, 535.
1914 C, 60.
1916 B, 201.
Zittel and Broili 1923 A, 191.

TREMATOPS Williston. Type *T. milleri* Williston.

Williston, S. W. 1909 B, 636.
Abel, O. 1912 F, 138.
1919 A, 256.
1921 A, 251.
Amalitsky, V. P. 1924 B, 74.
Anonymous 1912 A, 519.
Broili, F. 1915 A, 574.
Broom, R. 1910 A, 214, 220.
1921 A, 145.
Case, E. C. 1911 B, 67, 83, 130; 14 (Trematosaurus).
1912 A, 203.
1915 A, 131.
Douthitt, H. 1917 A, 238.
Geol. Magazine, 1912 A, 519.
Gregory, Miner and Noble 1923 A, 285.
Heilmann, G. 1926 A, 159, fig. 113.
Huene, F. 1913 B, 379.
1913 G, 502.
1922 G, 458.
Jaekel, O. 1922 A, 22, 23.
Lakjer, T. 1927 A, 192, 196, fig. 73.
Mehl, M. G. 1926 A, 466.
Moodie, R. L. 1911 C, 377.
1912 D, 338.
1915 J, 318.
Nopcsa, F. 1923 E, 1049, fig. 8.
1926 A, 635.
Osborn, H. F. 1916 E, 614.
Romer, A. S. 1928 C, 257.
Schmalhausen, J. 1917 A, 107.
Steiner, H. 1922 A, 331, 340.
Thorpe, M. R. 1926 A, 77.
Watson, D. M. S. 1913 C, 346.
1913 D, 24.
1914 M, 348.
1917 B, 2.
1919 A, 286.
1919 B, 7, 53, 65.
Williston, S. W. 1910 A, 270, 278.
1910 D, 533, 535.
1910 F, 597.
1914 C, 62.
1914 E, 121.
1915 A, 249.
1916 B, 202, figs. 41, 42.

Williston, S. W. 1925 A, 169, 184, 185, 195, fig. 151.
Wiman, C. 1917 A, 235.
Zittel and Broili 1911 A, 169.

Trematops milleri Willist.

Williston, S. W. 1909 B, 637, figs. 1-6.
Abel, O. 1912 F, 219, 385, 386.
1919 A, 258, figs. 197, 207, 208.
1920 A, 349, fig. 552.
Broom, R. 1921 A, 144, fig. 1.
Case, E. C. 1911 B, 67, 130, pls. xiv-xvi; text-figs. 46.
1915 A, 31, 97, 131; text-fig. 19.
Gilmore, C. W. 1926 A, 22, 36; text-fig. 15.
Gordon, C. H. 1913 A, 25.
Huene, F. 1909 D, 332.
1913 G, 503, fig. 4.
Mehl, M. G. 1926 A, 470.
Moodie, R. L. 1911 E, 239, 240.
1914 A, 27.
Osborn, H. F. 1918 D, 686.
Schmalhausen, J. 1917 B, 135, fig. 5.
Steiner, H. 1921 A, 536.
Williston, S. W. 1910 A, 278.
1910 D, 535.
1911 B, 142, figs. 3, 4.
1914 C, 61, fig. 3.
Williston and Case 1913 B, 56, text-fig. 35.
Zittel and Broili 1911 A, 169, fig. 300.
1923 A, 183, figs. 287, 293.
Permian (Clear Fork); Texas.

Trematops thomasi Mehl.

Mehl, M. G. 1926 A, 466, figs. 1-4.
Permian (Clear Fork); Oklahoma.

ARCHEGOSAURIDÆ Fritsch.

Fritsch, A. 1885, Fauna der Gaskohle, etc., ii, 13.
Hay, O. P. 1902 A, 419.
Abel, O. 1919 A, 272.
Broili, F. 1927 D, 375, 378, pl. vii; text-figs. 3, 4.
Gadow, H. 1896 A, 17 (Archegosauri).
Huene, F. 1913 G, 507.
1926 A, 262 (Rhachitomi).
Huxley, T. H. 1875 C, 751.
Lydekker, R. 1890 A, 177.
Nicholson and Lydekker 1889 A, 1029.
Zittel and Broili 1923 A, 192.

Archegosaurus Goldfuss.

Goldfuss, G. A. 1847 B, 400.
Hay, O. P. 1902 A, 419.
Abel, O. 1919 A, 898, figs. 171, 196.
Broili, F. 1908 D, 239.
1927 D, 378, pl. vii; text-figs. 3, 4.
Jaekel, O. 1911 A, 112, fig. 125.
Lydekker, R. 1890 A, 177, fig. 43.
Nicholson and Lydekker 1889 A, 1029, fig. 958.
Owen, R. 1866 A, 158.
Schwarz, H. 1908 A, 320.
Whittard, W. F. 1928 A, 255, pl. iii, 3 text-figs.
Woodward, A. S. 1898 B, 133, figs. 84, 86, 87.

Type *A. dechenii* Goldfuss.

Zittel, K. A. 1890 (1888) A, 351, 384, figs. 328, 329, 332, 373, 377.
Zittel and Broili 1911 A, 166, figs. 296, 297.
1923 A, 192, fig. 298*a*.

Archegosaurus sp. indet.

Cooper, J. G. 1875 B, 402. Undetermined deposit. Mare Island, California.
Cooper stated that a tooth had been found by himself and that the identification had been made by Professor Louis Agassiz.

TRIMERORHACHIDÆ Cope.

Hay, O. P. 1902 A, 419 (Archegosauridæ, in part).
Abel, O. 1919 A, 275.
1920 A, 350 ("trimerorhachiden").
Amalitsky, V. P. 1924 A, 62.
Arldt, T. 1907 D, 678 (Rhachitomi).
1912 A, 656 (Trimerorhachidæ, Rhachitomi).
1916 A, 95, 142 ("trimerorachiden").
Boulenger, G. A. 1902 F, 383.
Broili, F. 1904 D, 582 ("rhachitomen").
1913 A, 98.
Case, E. C. 1911 B, 14, 23, 38, 80.
1915 A, 97.
Cope, E. D. 1891 N, 29.
Dollo, L. 1884 D, 88.
Huene, F. 1913 G, 506.
Jaekel, O. 1922 A, 23.
Lydekker, R. 1885 F, 9 (Trimerorhachidæ, Rhachitomi).
Moodie, R. L. 1909 D, 243 (Rhachitomi).
1910 C, 240 (Rhachitomi).
1911 E, 240.
Sus[c]hkin, P. P. 1925 A, 180 (Rhachitomi).
Watson, D. M. S. 1917 B, 2 (Rhachitomi).
1919 B, 66.
Williston, S. W. 1910 D, 535 (Trimerorhachidæ, Rhachitomi).
1916 B, 200 (Rhachitomi); 206 (Trimerorhachidæ).
1918 A, 75 (Rhachitomi).
Zittel and Broili 1923 A, 192.

Trimerorhachis Cope.

Hay, O. P. 1902 A, 420.
Abel, O. 1919 A, 274.
Amalitsky, V. P. 1921 A, 8.
1924 A, 51.
Anonymous 1912 A, 519.
Arldt, T. 1916 A, 98.
Broili, F. 1904 A, 30, 48, pl. iii, figs. 3-7; pl. iv, figs. 1-3.

Type *T. insignis* Cope.

Broili, F. 1908 F, 50.
1914 A, 164.
1926 A, 206, 213.
Broom, R. 1910 C, 476.
1913 F, 563, 569.
1913 H, 73.
1915 B, 368.
1917 A, 977.

Bryant, W. L. 1919 A, 11.
Case, E. C. 1908 C, 576, 579.
1911 B, 14, 39, 82, 106, pl. xii, fig. 2; text-figs. 40-42.
1915 A, 127, text-fig. 14.
Cummins, W. F. 1908 A, 745.
Dollo, L. 1893 D, 10.
Drevermann, F. 1920 A, 91, 105.
Eastman, C. R. 1916 A, 655.
Gadow, H. 1901 B, 82.
Gaudry, A. 1888 A, 2.
Geol. Mag. 1912 A, 519.
Gould, C. W. 1901 A, 339.
Gregory, W. K. 1915 D, 336, fig. 3.
1916 D, 105 (Trimerorachis).
1917 C, 975.
1920 A, 222.
Hoepen, E. C. N. 1915 A, 136.
Huene, F. 1913 B, 372.
1922 G, 448, 453.
Kingsley, J. S. 1925 A, 123, fig. 130.
Lakjer, T. 1927 A, 195.
Lydekker, R. 1885 F, 11.
Moodie, R. L. 1915 G, 371.
1915 J, 318.
Osborn, H. F. 1916 E, 614.
1917 B, 182.
1918 D, 687.
Romer, A. S. 1928 C, 257.
Schuchert, C. 1910 A, 570.
Schwartz, H. 1908 A, 320.
Sewertzoff, A. N. 1926 D, 81.
Stensiö, E. A. 1921 A, 142.
Sushkin, P. P. 1927 A, 280, 284, 310.
Watson, D. M. S. 1912 B, 586.
1914 F, 780.
1916 C, 631.
1916 E, 84 (Trimerorachis).
1919 A, 286.
1919 B, 7, 50, 59.
Whittard, W. F. 1928 A, 263.
Williston, S. W. 1910 A, 272, pl. xv, fig. 6.
1910 D, 533, 535.
1910 F, 586.
1913 B, 625.
1914 A, 26, fig. 9.
1914 D, 415, 418.
1915 A, 578.
1915 B, 246, figs. 3, 5, 6.
1916 B, 207, figs. 46, 47.
1916 C, 291, figs. 1-3.
1917 A, 309.
1918 A, 76, fig. 1.
1925 A, 94, 98.
Wills, L. J. 1916 A, 8, 17.
Zittel and Broili 1911 A, 169.
1923 A, 181, 192, fig. 276.

Trimerorachis alleni Case.

Case, E. C. 1910 A, 181.
Abel, O. 1919 A, 275, fig. 203.
1920 A, 351, fig. 555.
Case, E. C. 1911 B, 47, text-fig. 7.
1915 A, 97.
Moodie, R. L. 1911 C, 379.
1914 A, 27.
Williston, S. W. 1913 B, 626, fig. 1 (This species?).
1914 D, 416, fig. 17.
1925 A, 28, fig. 14.
Permian (Clear Fork); Texas.

Trimerorachis bilobatus Cope.

Hay, O. P. 1902 A, 420.
Beede, J. W. 1907 A, 119.
Broili, F. 1904 A, 30.
Case, E. C. 1911 B, 43, text-fig. 5.
1915 A, 97.
Cummins, W. F. 1908 A, 741.
Moodie, R. L. 1911 E, 240.
1914 A, 27.
Permian (Wichita); Texas.

Trimerorachis conangulus Cope.

Hay, O. P. 1902 A, 420.
Beede, J. W. 1907 A, 120.
Broili, F. 1904 A, 30 (T. coangulus).
1908 F, 50 (T. coangulus).
Broom, R. 1913 F, 578.
Case, E. C. 1911 B, 44, 112, pl. v, fig. 6; text-fig. 6.
1915 A, 97.
Cummins, W. F. 1908 A, 744.
Moodie, R. L. 1911 E, 240.
1914 A, 27.
Permian (Clear Fork); Texas.

Trimerorachis insignis Cope.

Hay, O. P. 1902 A, 420.
Abel, O. 1919 A, 274, fig. 202.
1920 A, 348, fig. 551.
1922 C, 568, fig. 470.
Beede, J. W. 1907 A, 119.
Broili, F. 1904 A, 31.
1908 F, 50.
Broom, R. 1913 F, 569, figs. 4-9.
1913 H, 74, fig. 1.
Case, E. C. 1902 B, 64 (This species?).
1911 B, 41, 43, 107, 112, pl. xii, fig. 4; text-figs 5, 36-39, 41.
1915 A, 97.
Cope, E. D. 1891 N, 28; figs. 11, 12.
Cope and Matthew 1915 A, pl. vii, fig. 1; pl. viii.
Cummins, W. F. 1908 A, 744.
Gregory, W. K. 1920 A, 115, fig. 12.
Huene, F. 1913 B, 372, fig. 57.
Moodie, R. L. 1911 E, 240.
1914 A, 27.
Osborn, H. F. 1918 D, 686.
Williston, S. W. 1914 C, 60, fig. 2.
1914 D, 417, figs. 18, 19.
1915 B, 247, figs. 1, 2, 4.
1925 A, 29, fig. 15.
Wiman, C. 1916 B, 215.
Permian (Wichita); Texas: (Enid); Oklahoma.

Trimerorachis leptorhynchus Case.

Case, E. C. 1902 B, 63, 64.
Beede, J. W. 1907 A, 139.
Case, E. C. 1911 B, 45.
1915 A, 97.

Moodie, R. L. 1911 E, 240.
1914 A, 27.
Williston, S. W. 1910 D, 535.
Permian (Enid); Oklahoma.

Trimerorhachis medius Broom.

Broom, R. 1913 F, 577, fig. 10.
Permian: Locality not given.

Trimerorhachis mesops Cope.

Hay, O. P. 1902 A, 420.
Beede, J. W. 1907 A, 120.
Broili, F. 1904 A, 30.
Case, E. C. 1911 B, 46, 112, pl. xii, fig. 1.
1915 A, 97.
Cummins, W. F. 1908 A, 743.
Huene, F. 1913 B, 372, fig. 56.
Moodie, R. L. 1911 E, 240.
1914 A, 27.
Permian (Clear Fork); Texas.

Trimerorhachis sp. indet.

Cummins, W. F. 1908 A, 740. Permian; Texas.
Phillips, W. B. 1912 A, 41 (Trimerorachis).
Permian (Wichita); Texas.
Tilton, J. L. 1926 B, 393, fig. 2 (This genus?).
Permian (Gilmore); West Virginia.

TERSOMIUS Case. Type *T. texensis* Case.

Case, E. C. 1910 A, 180.
Arldt, T. 1916 A, 98.
Broili, F. 1913 A, 98.
Case, E. C. 1911 B, 14, 51.
Moodie, R. L. 1911 C, 379.
Williston, S. W. 1916 B, 207.
Zittel and Broili 1923 A, 193.
A genus of uncertain position.

Tersomius texensis Case.

Case, E. C. 1910 A, 180, text-fig. 10.
1911 B, 51.
1915 A, 97.
Moodie, R. L. 1914 A, 26.
Permian (Clear Fork); Texas.

DISSOROPHIDÆ Willist.

Williston, S. W. 1910 A, 277.
Hay, O. P. 1902 A, 429 (Chelydosauria, in part); 492 (Otocœlidæ).
Abel, O. 1919 A, 278.
Arldt, T. 1912 A, 656 (Dissorophidæ).
1916 A, 98, 142 ("dissorophiden").
Boulenger, G. A. 1902 F, 383.
Broili, F. 1904 A, 69, 100 (Otocœlidæ).
1913 A, 98 (Dissorophidæ).
Case, E. C. 1905 A, 298 (Otocœlidæ, Chelydosauria, in part).
1905 B, 127 (Otocœlidæ, Chelydosauria, in part).
1907 E, 157 (Chelydosauria, in part).
1908 D, 565 (Chelydosauria, in part).
1911 B, 57 (Otocœlidæ); 14, 51, 80, 116 (Dissorophidæ).
Case, E. C. 1915 A, 97, 107.
Case and Williston 1913 A, 7 (Dissorophidæ, Aspidosauridæ).
Eastman, C. R. 1912 C, 657.
Hay, O. P. 1908 A, 29 (Otocœlidæ).
Huene, F. 1913 G, 507.
1920 C, 211.
Jaekel, O. 1922 A, 25.
Moodie, R. L. 1911 E, 241.
Watson, D. M. S. 1919 B, 65 (Dissorophidæ, Dissorophinæ).
Williston, S. W. 1908 A, 140 (Otocœlidæ).
1910 D, 535.
1914 B, 56 (Dissorophidæ, Dissorophinæ).
1916 B, 202 (Dissorophidæ, Dissorophinæ).
Zittel and Broili 1923 A, 190.

DISSOROPHUS Cope. Type *D. multicinctus* Cope.

Hay, O. P. 1902 A, 420 (Dissorophus); 430 (Otocœlus).
Abel, O. 1919 A, 280.
Anonymous 1912 A, 520.
Broili, F. 1904 A, 43 (Dissorophus; 100 (Otocœlus).
1913 A, 97.
Broom, R. 1903 D, 202 (Otocœlus).
Case, E. C. 1905 A, 298 (Otocœlus).
1905 B, 127 (Otocœlus).
1907 D, 558 (Otocœlus).
1908 C, 579.
1908 D, 565 (Otocœlus).
1911 B, 14, 52, 82, 115 (Dissorophus); 54, 58, 59 (Otocœlus a syn.).
1915 A, 110, 128, 130.
Cummins, W. F. 1908 A, 745.
Geol. Mag. 1912 A, 520.
Goette, A. 1899 A, 426.
Gregory, W. K. 1917 B, 313, 317.
Hay, O. P. 1908 A, 29 (Otocœlus).
Hoepen, E. C. N. 1915 A, 140 (Dissorophus).
Huene, F. 1913 B, 379.
1913 G, 502.
Jaekel, O. 1922 A, 25.
Lakjer, T. 1927 A, 192.
Moodie, R. L. 1908 A, 30.
1909 E, 39.
Nopcsa, F. 1926 A, 635.
Schuchert, C. 1910 A, 570.
Stappenbeck, R. 1905 A, 430 (Otocœlus).
Sternberg, C. H. 1909 C, 242 (Otocœlus).
Watson, D. M. S. 1913 C, 346.
1919 B, 8, 50.
Williston, S. W. 1910 A, 259, 278.
1910 D, 532, 534, 535 (Dissorophus); 534 (Otocœlus).
1914 B, 51, 56.
1914 E, 121.
1916 B, 202.
Zittel and Broili 1911 A, 169 (Dissorophus, Otocœlus).

Zittel and Broili 1923 A, 170, 191, fig. 264.
Zittel and Eastman 1902 A, 181 (Otocœlus).

Dissorophus multicinctus Cope.

Hay, O. P. 1902 A, 420 (D. multicinctus, D. articulatus); 430 (Otocœlus testudineus, O. mimeticus).
Beede, J. W. 1907 A, 120 (Otocœlus testudineus, O. mimeticus).
Case, E. C. 1911 B, 54, 59, 115, 117, pl xiii, pl. xxiii, figs. 11, 12; text-figs. 10, 45 (Otocœlus testudineus, O. mimeticus as syns.).
1915 A, 97, 129, text-fig. 16 (D. articulatus, Otocœlus mimeticus as syns.).
Cummins, W. F. 1908 A, 744 (D. multicinctus; O. mimeticus; Otocœlus testudineus).
Gadow, H. 1901 B, 82.
Huene, F. 1913 B, 369 (D. mimeticus).
1922 G, 406 (Dissorophus).
Moodie, R. L. 1908 A, 30 (D. multicinctus, D. articulatus).
1911 C, 376.
1911 E, 241 (D. multicinctus; D. mimeticus).
1914 A, 18 (D. multicinctus); 23 (Otocœlus testudineus, O. mimeticus).
Williston, S. W. 1910 A, 277.
1910 D, 535, pls. i-iii.
1914 B, 56.
Permian (Clear Fork); Texas.

Cacops Willist. Type *C. aspidephorus* Willist.

Williston, S. W. 1910 A, 253, 278.
Abel, O. 1912 F, 385, 387.
1919 A, 256, 261, 279.
Anonymous 1912 A, 519, 520.
Broili, F. 1913 A, 97.
1913 C, 529.
1915 A, 574.
1915 C, 285.
1926 A, 208.
Case, E. C. 1911 B, 14, 62, 83, 119.
1912 A, 203.
1915 A, 110, 128, 129.
Case and Williston 1913 A, 7.
Geol. Mag. 1912 A, 519, 520.
Gregory, W. K. 1917 A, 381.
1917 B, 317.
Hoepen, E. C. N. 1915 A, 141.
Huene, F. 1912 D, 103.
1913 B, 379.
1913 G, 502.
1922 G, 453.
Jaekel, O. 1922 A, 22, 23.
Kingsley, J. S. 1925 A, 37, fig. 41.
Lakjer, T. 1927 A, figs. 73, 84.
Moodie, R. L. 1915 J, 318.
Morton, D. J. 1926 A, 413.
Nopcsa, F. 1923 E, 1047.
1923 H, 14, pl. v, fig. 1.
1926 A, 635.
Osborn, H. F. 1916 E, 613.
1917 B, 182, fig.
Romer, A. S. 1922 B, 543.
1928 C, 257.
Schmalhausen, J. 1917 A, 107.
Schuchert and Levene 1927 A, 290, fig.
Thorpe, M. R. 1928 A, 77.
Watson, D. M. S. 1913 C, 346.
1914 D, 167.
1916 E, 84.
1917 B, 2.
Watson, D. M. S. 1919 A, 286.
1919 B, 8, 50, 53, 65.
1926 A, 204, 241.
Williston, S. W. 1910 D, 526, 535.
1911 B, 42.
1914 A, 35, fig. 18.
1914 B, 51, 56.
1914 C, 68.
1914 E, 121.
1916 B, 202, fig. 43.
1918 B, 91, fig. 16.
1925 A, 25, 125, 126, 143, 159, figs. 11, 96, 130.
Zittel and Broili 1911 A, 169.
1923 A, 190.

Cacops aspidephorus Willist.

Williston, S. W. 1910 A, 253, pls. vi-xiv, xvii.
Abel, O. 1919 A, 254, figs. 195, 209, 210.
1920 A, 352, fig. 556.
1921 A, 250, fig. 92.
Broili, F. 1926 A, 208, figs. 2, 3.
Case, E. C. 1911 B, 63, 119, pls. xvii, xviii, pl. xix, fig. 1, pls. xx-xxii, pl. xxiii, figs. 1-10, pl. xxiv, fig. 3.
1915 A, 97, 129, text-fig. 17.
Frassetto, F. 1915 A, 14, fig. 6.
Gilmore, C. W. 1926 A, 21, 36, text-fig. 14.
Gregory, W. K. 1915 D, 375, fig. 15.
Jaekel, O. 1911 A, 114, fig. 129.
Lull, R. S. 1917 B, 493, fig. 146.
1918 C, 125, fig.
Lydekker, R. 1911 A, 688, pl. (C. aspidophorus).
Moodie, R. L. 1911 C, 377.
1911 E, 241.
Williston, S. W. 1910 D, 528, 535.
1914 B, 56.
1914 C, 62, fig. 4.
Zittel and Broili 1923 A, 181.
Permian (Clear Fork); Texas.

ASPIDOSAURIDÆ Case.

Case, E. C. 1910 A, 179.
Abel, O. 1919 A, 280.
Arldt, T. 1912 A, 656.
1916 A, 98, 142 ("aspidosauriden").
Broili, F. 1913 A, 98.
Case, E. C. 1910 A, 179.
Case, E. C. 1911 B, 14, 63, 80, 83, 116.
1915 A, 97, 107.
Case and Williston 1913 A, 7.
Huene, F. 1913 G, 507.
Watson, D. M. S. 1919 B, 65 (Aspidosaurinæ).
Williston, S. W. 1914 B, 56 (Aspidosaurinæ).
1916 B, 203 (Aspidosaurinæ).

ASPIDOSAURUS Broili. Type *A. chiton* Broili.

Broili, F. 1904 A, 40.
Abel, O. 1919 A, 280.
Amalitsky, V. P. 1924 B, 74.
Case, E. C. 1911 B, 14, 63, 83, pl. xix, fig. 2.
1915 A, 110, 130.
Jaekel, O. 1922 A, 25.
Osborn, H. F. 1916 E, 614.
1917 B, 182.
Watson, D. M. S. 1919 B, 7, 50.
Williston, S. W. 1910 A, 259, 271.
1910 D, 535.
1911 B, 12.
1911 D, 379.
1914 B, 56.
1915 A, 578.
1916 B, 203.
Zittel and Broili 1911 A, 169.
1923 A, 170, 190, fig. 263.

Aspidosaurus apicalis (Cope).

Hay, O. P. 1902 A, 422 (Zatrachys).
Broili, F. 1904 A, 43 (Zatractus).
Case, E. C. 1907 C, 665, fig. 1 (Zatrachys).
1911 B, 65, text-fig. 15.
1915 A, 97.
Cummins, W. F. 1908 A, 744 (Zatrachys).
Moodie, R. L. 1911 E, 240.
1914 A, 15.
Williston, S. W. 1910 A, 260 (Zatrachys).
1911 B, 135 (Syn? of Platyhystrix rugosus).
1914 B, 55.
Permian; New Mexico.

Aspidosaurus chiton Broili.

Broili, F. 1904 A, 40, pl. vi, figs. 6-19; text-fig. 2.
Case, E. C. 1911 B, 63, pl. v, fig. 5; text-fig. 13.
1915 A, 97, 130, text-fig. 18.
Moodie, R. L. 1911 E, 241.
1914 A, 15.
Williston, S. W. 1910 D, 535.
1914 B, 56.
Permian (Clear Fork); Texas.

Aspidosaurus crucifer Case.

Case, E. C. 1903 C, 399, fig. 5 (Zatrachys).
1907 C, 665, fig. 2 (Zatrachys).
1911 B, 66, text-fig. 15.
1915 A, 97, 130.
Moodie, R. L. 1914 A, 15.
Watson, D. M. S. 1919 B, 8 (A. cruciger).
Williston, S. W. 1910 A, 261 (Zatrachys).
1914 B, 55.
Permian (Wichita?, Clear Fork?); Texas: (Enid); Oklahoma.

Aspidosaurus glascocki Case.

Case, E. C. 1910 A, 179, text-fig. 9.
1911 B, 64, text-fig. 14.
1915 A, 97.
Moodie, R. L. 1914 A, 15.
Watson, D. M. S. 1919 B, 8.
Williston, S. W. 1911 B, 14.
1914 B, 55.
Permian (Clear Fork); Texas.

Aspidosaurus novomexicanus Willist.

Williston, S. W. 1911 B, 12, pl. xxxviii, fig. 1.
Case, E. C. 1915 A, 97.
Case and Williston 1913 A, 7, fig. 3.
Huene, F. 1913 B, 379.
Moodie, R. L. 1914 A, 15.
Watson, D. M. S. 1914 D, 167.
Williston, S. W. 1911 D, 379.
1914 B, 51, 56.
Permian; New Mexico.

Aspidosaurus sp. indet.

Wegeman, C. H. 1915 A, 25. Permian (Wichita); Oklahoma.

BROILIELLUS Willist. Type *B. texensis* Willist.

Williston, S. W. 1914 B, 49, 56.
Abel, O. 1919 A, 280.
Case, E. C. 1915 A, 110, 130.
Nopcsa, F. 1923 E, 1052.
Osborn, H. F. 1918 D, 687.
Watson, D. M. S. 1919 B, 7, 50, 53, 65.
Williston, S. W. 1915 B, 575.
1916 A, 165.
1916 B, 203, fig. 44.

Broiliellus peltatus Willist.

Williston, S. W. 1911 B, 13, pl. xxxii, fig. 7 (Aspidosaurus?).
Case, E. C. 1915 A, 97, 167.
Moodie, R. L. 1914 A, 15 (Aspidosaurus).
Williston, S. W. 1914 B, 54 (Aspidosaurus); 56 (Broiliellus).
Permian (Clear Fork); Texas.

Broiliellus texensis Willist.

Williston, S. W. 1914 B, 50, 56, figs. 1-3.
Case, E. C. 1915 A, 97, 130.
Gregory, W. K. 1920 A, 115, fig. 16.
Permian (Clear Fork); Texas.

ALEGEINOSAURUS Case. Type *A. aphthitos* Case.

Case, E. C. 1911 B, 14, 60, 83.
Case, E. C. 1915 A, 110, 128.
Watson, D. M. S. 1919 B, 7, 65.
Williston, S. W. 1914 B, 55, 56.
1916 B, 203.

Alegeinosaurus aphthitos Case.

Case, E. C. 1911 B, 60, fig. 12.
Case, E. C. 1907 C, 665, figs. 3-6 (Zatrachys apicalis?).
1915 A, 97.
Miner, R. W. 1925 A, 165, fig. 6.
Moodie, R. L. 1914 A, 14 (Algeinosaurus).
Williston, S. W. 1914 B, 56.
Permian (Clear Fork); Texas.

ZATRACHYDIDÆ Williston.

Williston, S. W. 1910 D, 535.
Abel, O. 1919 A, 281 (Zatrachydæ).
Jaekel, O. 1922 A, 25 (Zatrachydæ).
Watson, D. M. S. 1919 B, 66 (Zatrachydæ).
Williston, S. W. 1914 B, 55.
1916 B, 203.
Zittel and Broili 1923 A, 191 (Zatrachidæ).

ZATRACHYS Cope. Type *Z. serratus* Cope.

Hay, O. P. 1902 A, 422.
Abel, O. 1919 A, 281.
Arldt, T. 1916 A, 98.
Broili, F. 1904 A, 35, 43, 47, 49 (Zatrachis).
Broom, R. 1913 F, 592.
Case, E. C. 1911 B, 14, 47, 82, 113, text-fig. 43.
1915 A, 111, 128.
Cummins, W. F. 1908 A, 745.
Dollo, L. 1884 D, 88.
Gadow, H. 1901 B, 82 (Zatachys).
Lakjer, T. 1927 A, 195.
Lydekker, R. 1885 F, 10, 12.
Nopcsa, F. 1926 A, 635.
Schuchert, C. 1910 A, 570.
Stensiö, E. A. 1921 A, 142.
Watson, D. M. S. 1919 B, 9, 66.
Williston, S. W. 1910 A, 260.
1910 D, 532.
1915 A, 578.
1916 B, 204.
Zittel and Broili 1923 A, 191.

Zatrachys conchigerus Cope.

Hay, O. P. 1902 A, 422.
Beede, J. W. 1907 A, 120.
Case, E. C. 1911 B, 50.
1915 A, 97.
Cummins, W. F. 1908 A, 744.
Moodie, R. L. 1911 E, 240.
1914 A, 28.
Permian (Clear Fork); Texas.

Zatrachys microphthalmus Cope.

Hay, O. P. 1902 A, 422.
Abel, O. 1919 A, 282, fig. 211.
Beede, J. W. 1907 A, 120.
Broili, F. 1904 A, 43 (Zatrachis).
Broom, R. 1913 E, 531.
1913 F, 592, fig. 21.
Case, E. C. 1915 A, 128, text-fig. 15.
Cummins, W. F. 1908 A, 743.
Huene, F. 1913 B, 370, fig. 54.
Moodie, R. L. 1911 E, 240.
Permian (Clear Fork); Texas.

Zatrachys serratus Cope.

Hay, O. P. 1902 A, 422.
Beede, J. W. 1907 A, 119.
Broom, R. 1913 F, 594.
Case, E. C. 1911 B, 48, 113, text-figs. 8, 43.
1915 A, 97.
Cummins, W. F. 1908 A, 742.
Huene, F. 1922 G, 453.
Moodie, R. L. 1911 E, 240.
1914 A, 28.
Watson, D. M. S. 1919 B, 8 ("A." serratus).
Permian (Wichita); Texas.

PLATYHYSTRIX Willist. Type *Ctenosaurus rugosus* Case.

Williston, S. W. 1911 D, 379
Abel, O. 1919 A, 281 (Platyhystrix); 370 (Ctenosaurus).
Case, E. C. 1915 A, 111, 115, 122, 144.
Drevermann, F. 1915 A, 405 (Ctenosaurus).
Huene, F. 1919 A, 180.
Schuchert, C. 1910 A, 570 (Ctenosaurus).
Watson, D. M. S. 1919 B, 9, 66.
Williston, S. W. 1911 B, 135.
1915 A, 578.
1916 B, 204, fig. 45.

Platyhystrix rugosus (Case).

Case, E. C. 1910 A, 176 (Ctenosaurus).
1915 A, 99.
Williston, S. W. 1911 B, 135, pl. xxxvi, fig. 1; pl. xxxvii, fig. 6.
1911 D, 379.
Williston and Case 1913 A, 6.
Permian; New Mexico.

Platyhistrix sp. indet.

Cummins, W. F. 1908 A, 740 (Ctenosaurus).
Permian; Texas.

GONIOCARA, genus novum. Type *Goniocephalus willistoni* Broili.

Broili, F. 1913 A, 100 (Goniocephalus; preoccupied).
Williston, S. W. 1916 B, 208 (Goniocephalus).
The position of this genus is doubtful. It may be a reptile.

Goniocara willistoni (Broili).

Broili, F. 1913 A, 100, pl. ix, figs. 3, 4 (Goniocephalus).
Case, E. C. 1915 A, 99 (Goniocephalus).
Permian (Clear Fork); Texas.

Suborder LABYRINTHODONTES Meyer.

Meyer, H. 1842 A, 301.
Hay, O. P. 1902 A, 417 (Apœcospondyli, part).
Abel, O. 1921 A, 251 ("labyrinthodonten").
Allis, E. P. 1905 A, 494.
Amalitsky, V. P. 1924 A, 50 ("labyrinthodonts").
Arldt, T. 1907 D, 661 (Labyrinthodontidæ); 683 (Stereospondyli).
Arldt, T. 1912 A, 662, 663 (Labyrinthodontidæ).
1916 A, 100, 143 ("labyrinthodonten").
Brandt, J. F. 1865 A, 8 ("labyrinthodonten").
Branson, E. B. 1905 B, 568 (Labyrinthodontidæ).
Branson and Mehl 1928 B, 301 ("labyrinthodonts").

Branson and Mehl 1928 C ("labyrinthodonts").
Boulenger, G. A. 1902 F, 383 (Labyrinthodonta).
1904 C, 479, 480.
Broili, F. 1913 C, 530 (Stereospondyli).
1926 A, 213 ("labyrinthodonten").
Broom, R. 1899 A, 766 (Labyrinthodontia).
1903 E, 136 ("labyrinthodonts").
1903 G, 145 ("labyrinthodonts").
1903 I, 557 ("labyrinthodonts").
1909 B, 165 ("labyrinthodonts").
1911 A, 917 ("labyrinthodonts").
Carus, V. 1875 A, 485 (Labyrinthodontia).
Cope, E. D. 1880 U, 145 ("labyrinthodontes").
1891 N, 30 (Labyrinthodontidæ).
Dollo, L. 1884 D, 91.
1885 C, 306 (Labyrinthodonta).
Fraas, E. 1901 D, 318 (Labyrinthodon).
1913 A, 275 ("labyrinthodonten").
Gadow, H. 1901 B, 82 (Labyrinthodonta).
Gaupp, E. 1912 A, 563, 566 ("labyrinthodonten").
Gervais, P. 1859 A, 504 (Labyrinthodontia).
Giebel, C. G. 1855 A, 95 (Labyrinthodonta).
Green, J. R. 1861 A, 219, 227 (Labyrinthodontia).
Gregory, W. K. 1915 D, 365 (Stereospondyli).
Haeckel, E. 1868 A, 448 (Labyrinthodonta).
Heilprin, A. 1887 A, 310 (Labyrinthodontia).
Huene, F. 1902 A, 68 (Stereospondyli).
1913 G, 506 (Stereospondyli).
1920 C, 211 (Stereospondyli).
1922 G, 435 ("labyrinthodonten").
1926 A, 262 (Stereospondyli).
Huxley, T. H. 1865 C, 3 ("labyrinthodonts").
1870 F, 528 ("labyrinthodonts").
1872 A, 150, seq. (Labyrinthodontia).
1875 C, 751, 761 (Labyrinthodontia).
Jaekel, O. 1922 A, 11.
Jaekel and Philippi 1903 A, 14 (Labyrinthodontia).
Lankester, E. R. 1905 A, 246 ("labyrinthodonts").
Makowsky, A. 1876 A, 161 ("labyrinthodonten").
Matthew, G. F. 1903 A, 109 ("labyrinthodonts").
Meyer, H. 1845 C, 282 (Labyrinthodontes).
Miall, L. C. 1874 C, 417 (Labyrinthodonta).
Moodie, R. L 1908 B, 363 (Stereospondyli).
1908 G, 516, 520 (Stereospondylia).
1909 C, 121 (Stereospondyli).
1909 D, 243 (Stereospondyli).
1909 E, 39 (Stereospondyli).
Moodie, R. L. 1910 B, 721 (Labyrinthodontidæ).
1911 A, 494 (Labyrinthodontidæ).
1915 F, 189, 190 (Stereospondylia).
1915 H, 638 (Stereospondylia).
1916 A, 5, 35, 198 (Stereospondylia).
1922 B, 332 ("labyrinthodonts").
Newton, E. F. 1900 A, 645 (Labyrinthodontia).
Osborn, H. F. 1899 J, 415 (Stegocephala).
Owen, R. 1845 B, 195 (Labyrinthodontia); pls. lxiii-lxiv *b* ("labyrinthodonts").
1860 A, 158 (Labyrinthodontia).
1860 E, 183 (Labyrinthodontes).
1866 A, 14 (Labyrinthodontia).
1876 D, 69 (Labyrinthodontia).
Reynolds, S. H. 1897 A, 545, fig. 27 (Labyrinthodontia).
Romer, A. S. 1925 A, 180 (Labyrinthodontia).
Schwarz, H. 1908 A, 382 (Stereospondyli).
Seeley, H. G. 1879 A, 180.
1899 B, 69 ("labyrinthodonts").
1905 A, 219 ("labyrinthodonts").
Stensiö, E. A. 1921 A, 140 (Stereospondyli).
Stromer, E. 1912 A, 60 (Labyrinthodonti).
Sushkin, P. P. 1927 A, 270, 310 (Stereospondyli).
Terra, P. 1911 A, 225 (Labyrinthodonta).
Thevenin, A. 1910 A, 4 ("labyrinthodontes").
Tims, H. W. M. 1903 A, 133 (Labyrinthodonta).
Vogt, C. 1854 A, 677 ("labyrinthodontier").
Watson, D. M. S. 1917 C, 168, 181 (Labyrinthodontia); 169 (Stereospondyli).
1919 A, 257 (Labyrinthodontia).
1919 B, 21, 49, 50, 67 (Stereospondyli); 64 (Labyrinthodontia).
1919 C, 239 ("labyrinthodonts").
1921 A, 333 (Labyrinthodontia).
1921 C, 73 (Labyrinthodonta).
1926 A, 190, 194, 199 ("labyrinthodonts," Stereospondyli).
Wilckens, O. 1911 A, 708 ("labyrinthodonten").
Williston, S. W. 1905 D, 297 (Labyrinthodontia).
1909 A, 302 ("labyrinthodonts").
Wills, L. J. 1916 A, 5 ("labyrinthodonts").
Wiman, C. 1914 A, 1 ("labyrinthodonten").
1915 A, 1 ("labyrinthodonten").
Woodward, A. S. 1904 D, 170 ("labyrinthodonts").
1924 A, 117 ("labyrinthodonts").
Wyman, J. 1843 B, 131 ("labyrinthodonts").
Zittel, K. A. 1890 A, 397 (Stereospondyli).
Zittel and Broili 1911 A, 171 (Stereospondyli).
1923 A, 193 (Stereospondyli).

MASTODONSAURIDÆ Nicholson and Lydekker.

Nicholson and Lydekker 1889 A, 1035.
Hay, O. P. 1902 A, 423.
Carus, V. 1875 A, 486 (Mastodonsauria).
Gregory, W. K. 1917 B, 313.
Huene, F. 1913 G, 508 (Euglypta).
1920 F, 453, 464.
Huxley, T. H. 1863 C, 570 (Mastodontosauria).
Jaekel, O. 1922 A, 23.
Miall, L. C 1875 A, 149 (Euglypta).
Moodie, R. L. 1916 A, 198.
Quenstedt, F. A. 1861 A, 297 ("mastodonsaurier").
Terra, P. 1911 A, 226 (Mastodonsaurii).
Watson, D. M. S. 1919 B, 68.
Zittel and Broili 1923 A, 196.

MASTODONSAURUS Jaeger. Type *Salamandroides giganteus* Jaeger.

Hay, O. P. 1902 A, 423.
Abel, O. 1912 F, 212.
1914 E, 392.
Abel, O. 1919 A, 247, fig. 191; 287, fig. 220.
Allis, E. P. 1919 B, 83.
Arldt, T. 1916 A, 100.

Branson, E. B. 1905 B, 568.
Broili, F. 1904 A, 33.
1904 D, 579.
1927 E, 20.
Bronn, H. G. 1849 A, 690.
Broom, R. 1908 D, 373.
Case, E. C. 1922 B, 24, text-fig. 6.
Credner, H. 1893 A, 673.
Dollo, L. 1885 C, 307.
Drevermann, F. 1920 A, 90, 104.
Fejérváry, G. J. 1921 C, 10.
Fraas, E. 1913 A, 279.
Gadow, H. 1896 A, 20 (This genus?).
Gaudry, A. 1885 B, 49.
Gaupp, E. 1894 A, 102.
1908 B, 524.
1912 A, 563.
Gervais, P. 1859 A, 506.
Giebel, C. G. 1855 A, 96, pls. xl, xli.
Hitchcock and Grier 1927 A, 192.
Huene, F. 1902 A, 14.
1909 D, 335, fig. 11.
1913 G, 505, figs. 7, 10.
1920 F, 453, figs. 10, 11.
1922 G, 449, 451, 458, figs. 2-12.
Huxley, T. H. 1862 A, liii.
1863 C, 568.
Jaeger, G. F. 1838 A, 547.
Jaekel, O. 1922 A, 12.
Kehrer, F. A. 1896 A, 353.
Kingsley, J. S. 1902 B, 333.
1925 A, 121, fig. 127.
Koken, E. 1893 B, 270.
Lakjer, T. 1927 A, 198.
Lucas, F. A. 1901 B, 376.
Lydekker, R. 1885 F, 6, 12.
Matthew, W. D. 1923 C, 405.
Meunier, S. 1903 A, 775 ("mastodonsaure").
Meyer, H. 1842 A, 301.
Miall, L. C. 1874 C, 418-435, pls. xxvi-xxviii.
1875 C, 23.
Miner, R. W. 1925 A, 161.
Moodie, R. L. 1910 B, 721.
1911 H, 239.
1912 E, 34.
1915 J, 318, fig. 7.
Nicholson and Lydekker 1889 A, 1035.
Nopcsa, F. 1923 E, 1052.
1926 A, 635.
Owen, R. 1845 B, 196, pl. lxiii, fig. 1 (Syn. of Labyrinthodon).
Romer, A. S. 1925 A, 180.
Schwarz, H. 1908 A, 322.
Seitz, A. L. L. 1907 A, 249.
Stickler, L. 1899 A, 85.
Sushkin, P. P. 1927 A, 314.
Thevenin, A. 1910 A, 36, fig. 21.
Watson, D. M. S. 1914 C, 396.
1916 E, 84.
1919 B, 36, 49, 60, fig. 22.
Wills, L. J. 1916 A, 16.
Wiman, C. 1914 A, 6, fig. 4.
Woodward, H. 1904 H, 143.
Zittel and Broili 1911 A, 172.
1923 A, 177, 196, figs. 274, 282, 300.

Mastodonsaurus sp. indet.

Hay, O. P. 1902 A, 423.
Branson, E. B. 1905 B, 595.
Dames, W. 1899 H, 152.
Lucas, F. A. 1901 B, 376. Triassic; Arizona.
Moodie, R. L. 1911 A, 495.
1911 H, 239.
1916 A, 198, pl. xxi, fig. 6.
Sauvage, H. E. 1901 B, 9 ("labyrinthodonte").
Watson, D. M. S. 1919 B, 21 (This genus?).

Dictyocephalus Leidy. Type *D. elegans* Leidy.

Hay, O. P. 1902 A, 423.
Arldt, T. 1916 A, 100.
Branson, E. B. 1905 B, 568, 590.
Huene, F. 1926 E, 6.
Zittel and Broili 1911 A, 171.

Dictyocephalus elegans Leidy.

Hay, O. P. 1902 A, 423.

Huene, F. 1920 F, 458.
Jaekel, O. 1922 A, 11.
Lyman, B. S. 1894 A, 207.
Moodie, R. L. 1911 A, 495.
1914 A, 17.
Schuchert, C. 1910 A, 579.
Watson, D. M. S. 1919 B, 48.
Triassic (Newark); North Carolina.

Eupelor Cope. Type *Mastodonsaurus durus* Cope.

Hay, O. P. 1902 A, 423.
Arldt, T. 1916 A, 100.
Branson, E. B. 1905 B, 568, 591.
Broili, F. 1921 A, 342.

Eupelor durus Cope.

Hay, O. P. 1902 A, 423.

Huene, F. 1921 B, 572, figs. 16-18. (This genus and species?).
Lyman, B. S. 1894 A, 212.
Moodie, R. L. 1911 A, 495.
1914 A, 19.
Watson, D. M. S. 1919 B, 48.
Triassic (Newark); Pennsylvania.

Pariostegus Cope. Type *P. myops* Cope.

Hay, O. P. 1902 A, 423.
Arldt, T. 1916 A, 100.
Branson, E. B. 1905 B, 592.

Pariostegus myops Cope.

Hay, O. P. 1902 A, 423.
Branson, E. B. 1905 B, 594.

Huene, F. 1920 F, 459.
Lyman, B. S. 1894 A, 207.
Moodie, R. L. 1911 A, 495.
1914 A, 24.
Schuchert, C. 1910 A, 579.
Watson, D. M. S. 1919 B, 48.
Triassic (Newark); North Carolina.

METOPOSAURIDÆ Watson.

Watson, D. M. S. 1919 B, 67.
Huene, F. 1920 F, 456, 464.
Jaekel, O. 1922 A, 11, 23.
Zittel and Broili 1923 A, 195.

METOPOSAURUS Lydekker. Type *Labyrinthodon diagnosticus* Owen.

Lydekker, R. 1890 A, 152 (To replace *Metopias* Meyer, preoccupied).
Abel, O. 1919 A, 257, 290, fig. 217 (Metopias).
1920 A, 352, fig. 554 (Metopias).
Amalitsky, V. P. 1921 A, 4.
1924 A, 50, 52.
Arldt, T. 1916 A, 100.
Case, E. C. 1922 B, 21, text-fig. 6.
Dollo, L. 1885 D, 630 (Metopias).
Drevermann, F. 1920 A, 94, 104 (Metopias).
Fejérváry, G. J. 1921 C, 10.
Fraas, E. 1889 A, 148 (Metopias).
Gaudry, A. 1885 B, 49 (Metopias).
1890 C, 171, fig. 265 (Metopias).
Huene, F. 1920 F, 456, fig. 13.
1922 G, 396, figs. 1, 36.
1922 H, 152.
Jaekel, O. 1911 A, 112 (Metopias).
1922 A, 5.
Kingsley, J. S. 1902 B, 333 (Metopias).
Lakjer, T. 1927 A, 192, 198 (Metopias).
Lucas, F. A. 1904 A, 193.
Meyer, H. 1842 A, 302 (Metopias).
Osborn, H. F. 1917 B, 183 (Metopias).
Owen, R. 1860 E, 196 (Labyrinthodon).
Sushkin, P. P. 1927 A, 314 (Metopias).
Watson, D. M. S. 1916 E, 85.
1919 B, 32, 50, figs. 18, 20.
1926 A, 191.
Williston, S. W. 1905 D, 297.
Zittel, K. A. 1890 A, 402, figs. 392, 393 (Metopias).
Zittel and Broili 1911 A, 172, fig. 304 (Metopias).
Zittel and Broili 1923 A, 195.
Zittel, Eastman, etc. 1902 A, 223, fig. 224 (Metopias).

Metoposaurus fraasi Lucas.

Lucas, F. A. 1904 A, 194, pl. iii.
Branson, E. B. 1905 B, 569, 589.
Broili, F. 1921 A, 342.
Case, E. C. 1915 A, 75.
1920 A, 2 (No name).
1922 B, 23, text-fig. 5.
Cross, W. 1908 A, 113.
Cross and Howe 1905 A, 480.
Darton, N. H. 1910 A, 42 (M. frassi).
Herbert, H. E. 1917 A, 34, 46.
Huene, F. 1920 F, 457.
1926 E, 3, 4, 6.
Lucas, F. A. 1901 B, 376 (Mastodonsaurus?).
Merrill, G. P. 1907 A, 74.
Moodie, R. L. 1911 A, 495.
1914 A, 22.
Zittel and Broili 1911 A, 172.
1923 A, 196.
Triassic (Chinle); Arizona.

Metoposaurus jonesi Case.

Case, E. C. 1920 A, 1-3, pl. i.
1922 B, pl. ii; text-fig. C (This genus?).
Huene, F. 1922 H, 149.
1926 E, 5.
Triassic (Dockum); Texas.

ANASCHISMA Branson. Type *A. browni* Branson.

Branson, E. B. 1905 B, 569, 570.
Abel, O. 1919 A, 285.
Allis, E. P. 1919 B, 82.
Amalitsky, V. P. 1924 A, 56.
Arldt, T. 1916 A, 100.
Broom, R. 1913 H, 73.
Case, E. C. 1922 B, 13, 21.
Gaupp, E. 1912 A, 565.
Huene, F. 1926 E, 4.
Jaekel, O. 1922 A, 14, 21.
Lakjer, T. 1927 A.
Moodie, R. L. 1910 B, 721.
1912 E, 34.
Versluys, J. 1912 B, 552.
Watson, D. M. S. 1912 B, 584.
1913 F, 957.
1919 B, 35, 50.
Wiman, C. 1914 A, 6, fig. 6 (Anachisma).
1916 B, 214.
Zittel and Broili 1911 A, 171.
1923 A, 196.

Anaschisma brachygnatha Branson.

Branson, E. B. 1905 B, 570, figs. 4, 9.
Huene, F. 1920 F, 458.
1922 H, 148.
1926 E, 4.
Jaekel, O. 1923 A, 11.
Moodie, R. L. 1908 G, 528.
Triassic (Popo Agie); Wyoming.

Anaschisma browni Branson.

Branson, E. B. 1905 B, 570, 585, figs. 1-8, 10.
Huene, F. 1920 F, 457.
1922 H, 148.
1926 E, 4.
Jaekel, O. 1922 A, 11, 12.
Moodie, R. L. 1908 G, 528, figs. 12, 14.
1911 A, 495.
1914 A, 14.
Versluys, J. 1912 B, 569, fig. W.
Triassic (Popo Agie); Wyoming.

BUETTNERIA Case. Type *B. perfecta* Case.

Case, E. C. 1922 B, 13.
Branson and Mehl 1928 C, 488.
Case, E. C. 1921 C, 445 (No description).

Buettneria perfecta Case.

Case, E. C. 1922 B, 13, pls. i-iv; text-figs. 1-3.
Branson and Mehl 1928 A, 325.
Case, E. C. 1921 C, 445 (No description).
1922 A, 445 (Nom. nud.).
1924 A, 423, pl. xxiii, fig. 2; pl. xxiv.
Huene, F. 1926 E, 5.
Triassic; Texas.

TYPOTHORAX Cope. Type *T. coccinarum* Cope.

Hay, O. P. 1902 A, 511.
Branson, E. B. 1905 B, 568.
Huene, F. 1922 H, 150, 152.
1926 E, 2.
Lydekker, R. 1912 C, 121.
Zittel and Broili 1911 A, 260.

Typothorax coccinarum Cope.

Hay, O. P. 1902 A, 511.
Cross, W. 1907 A, 640 ("Typothorax").
Cross and Howe 1905 A, 494.
Gregory and Camp 1918 A, 531, text-fig. 11.
Huene, F. 1915 A, 485, figs. 1-10.
1922 F, tab.
1926 E, 5, 7, 9, figs. 1, 2.
Merrill, G. P. 1907 A, 81.
Triassic (Dolores); New Mexico.

CALAMOPS Sinclair. Type *C. paludosus* Sinclair.

Sinclair, W. J. 1917 A, 319.

Calamops paludosus Sinclair.

Sinclair, W. J. 1917 A, 319, fig. 1.
Triassic (Newark); Pennsylvania.

Subclass LISSAMPHIBIA Haeckel.

Haeckel, E. 1866, Gen. Morphology.
Arldt, T. 1907 D, 663.
Gadow, H. 1898 A, 13.
Haeckel, E. 1868 A, 441.
1873 A, 512.

Order CAUDATI Duméril.

Unless otherwise indicated the authors, as quoted, apply to this order the name Urodela.

Duméril, A. M. C. 1806 A, 94 (Caudati).
Hay, O. P. 1902 A, 424.
Abel, O. 1912 F, 219, 706 ("urodelen").
1919 A, 324.
1920 A, 346.
1921 A, 144 ("urodelen").
Agar, W. E. 1906 A, 54 ("urodeles").
Ahlborn, F. 1896 B, 7 ("urodelen").
Allis, E. P. 1915 A, 616.
1923 A, 48.
Altmann, F. 1925 A, 88 ("urodelen").
Anderson, R. J. 1912 D, 251.
Anthony, R. 1912 A ("urodèles").
1913 A, 244 ("urodèles").
Anthony and Vallois 1914 A, 219 ("urodèles").
Arldt, T. 1907 D, 687.
1912 A, 668, 678.
1916 A, 101 ("urodelen").
Baird, S. F. 1850 B, 281, 283.
Baraldi, G. 1877 A, *passim* ("urodèles").
Bardeleben, K. 1889 A, 107 ("urodelen").
1889 B, 259.
1896 A, 114 ("urodelen").
1903 A, 23 ("urodelen").
1904 A, 109 ("urodelen").
Baur, G. 1887 H, 47 ("urodelen").
Beer, G. R. 1926 A, 307.
Bender, O. 1907 A, 39 ("urodelen").
Beyer, H. 1907 A, 267 ("urodelen").
Blainville, H. M. D. 1817 A, 107 ("reptiles nues").
Boas, J. E. V. 1914 B, 553 ("urodelen").
1914 C, 256 ("urodelen").
Bonaparte, C. L. 1832 A, 319.
Boulenger, G. A. 1902 F, 383 (Caudata).
Brauer, A. 1914 A, 284.
Braus, H. 1906 A, 238 ("urodelen").
Bridge, T. W. 1878 A, 725.
Broili, F. 1913 D, 351 ("urodelen").
Carter, J. T. 1905 A, 129, 140.
Carter, O. 1875 A, 73 ("urodelen").
Carus, V. 1875 A, 481.
Case, E. C. 1911 B, 14, 68.
1915 A, 97.
Cope, E. D. 1885 BB, 65.
1885 DD, 307.
1891 N, 28, 31.
Coyle, R. F. 1909 A, 582.
Cunningham and Boulenger 1912 A, 161, 211.
Dana, J. D. 1863 A, 1 ("tailed batrachians").
Davidson, A. 1895 A, 407.
Delsman, H. C. 1924 A, 155.
Dollo, L. 1884 D, 86 (Urodela).
1885 C, 303 ("urodèles").
Dombrowski, B. A. 1925 A, 72 ("urodelen).
Drüner, L. 1902 A, 435 ("urodelen").
1904 A, 273 ("urodelen").
1904 B, 361 ("urodelen").
1906 A, 7 ("urodelen").
Dunn, E. R. 1922 A, 418 (Caudata).
Ebner, V. 1896 A, 146 ("urodelen").
Edgeworth, F. H. 1920 A, 128.
1925 A, 225.
Eisler, P. 1895 A, 56 ("unrodelen").

Elliott, A. I. M. 1907 A, 648 ("urodeles").
Emery, C. 1890 A, 287 ("urodelen").
1895 A, 221 ("urodèles").
1897 D, 602 ("urodelen").
Fejérváry, G. J. 1920 A, 362 ("urodèles").
1925 A, 177 ("urodelen").
Frassetto, F. 1915 A ("urodeli").
Fuchs, H. 1907 C, 8 ("urodelen").
1909 B, 123, 148 ("urodelen").
1909 D, 8, 76 ("urodelen").
1910 A, 39 ("urodelen").
1911 A, 34 ("urodelen").
1911 B, 401 ("urodelen").
1912 D, 153 ("urodelen").
Fürbringer, M. 1902 A, 200 ("urodelen").
Gadow, H. 1901 B, 11, 94.
1902 B, 355.
1905 A, 200.
1914 A, 506 ("urodeles").
Gaupp, E. 1891 B, 110 ("urodelen").
1895 A, 57, seq. ("urodelen").
1899 A, 1034, 1038 ("urodelen").
1900 A, 571 ("urodelen").
1901 B, 944 ("urodelen").
1902 A, 224 ("urodelen").
1905 A, 286 ("urodelen").
1905 D, 936 ("urodelen").
1906 A, 24 ("urodelen").
1906 B, 688 ("urodelen").
1911 A, 401 ("urodelen").
1911 B, 115 ("urodelen").
1911 C, 437 ("urodelen").
1913 A, 23 ("urodelen").
Gebhardt, F. A. M. W. 1907 A, 78 ("urodelen").
Gegenbaur, C. 1870 A, 336 ("urodelen").
Gelderen, C. 1922 A, 234.
1923 A, 15.
1925 A, 501.
Gervais, P. 1859 A, 497 ("urodèles").
Goeppert, E. 1896 B, 3, fig. 2 ("urodelen").
Goette, A. 1879 A, 143 ("urodelen").
Goodrich, E. S. 1911 A, 101.
Gottlieb, H. 1914 A, 195 ("urodelen").
Gregory, W. K. 1912 D, 220 ("urodeles").
1915 D, 365.
1917 B, 316 (Caudata).
1925 A, 501.
Gregory and Adams 1915 A, 763 ("urodeles").
Grote, A. 1926 A, 458 ("uroden").
Haeckel, E. 1868 A, 449 (Sozara).
Hasse, C. 1892 C, 1 ("urodelen").
1893 B, 537 ("urodelen").
Hatschek, B. 1889 A, 86 ("urodelen").
1889 B, 116 ("urodelen").
Heilprin, A. 1887 A, 306.
Hertwig, O. 1874 B, ("urodelen").
Higgins, G. M. 1920 A, 293.
Hilzheimer, M. 1913 A, 475 ("urodeles").
Hoeven, J. v. d. 1866 A, 364.
Hoffmann, C. K. 1878 B, 615.
Howes, G. B. 1893 B, 272.
Howes and Swinnerton 1901 A, 17.
Huene, F. 1909 D, 333.
1922 G, 454 ("urodelen").
1926 A, 265.
Huxley, T. H. 1875 D, 24.
1879 A, 400 ("urodeles").
Ihering, H. 1880 A, 299 ("urodelen").
Iwanzoff, N. 1894 A, 579 ("urodelen").
Jacobshagen, E. 1920 A, 91 ("urodelen").
Jaekel, O. 1909 A, 194 ("urodelen").
1911 A, 129.
Johnson, A. 1883 A, 406.
Kapelkin, W. 1900 A ("urodelen").
Kehrer, F. A. 1896 A, 352 ("urodelen").
Kerr, J. G. 1900 A, 233.
1901 A, 694 ("urodeles").
1902 A, 424 ("urodeles").
1910 A, 204 ("urodeles").
Kingsbury, B. F. 1903 A, 313.
Kingsbury and Reed 1908 A, 81-91, text-figs. 1-7.
Kingsley, J. S. 1900 A, 205, 209 ("urodeles").
1901 B, 337.
1902 B, 323.
1925 A, 38, 122, 279.
Klaauw, C. J. 1924 B, 573.
Klein, E. E. 1868 A (Caudata).
Köstlin, O. 1844 A ("geschwänzte").
Koken, E. 1898 B, 143.
Kravetz, L. 1906 A, 6.
1911 A, 360 ("urodelen").
Lakjer, T. 1927 A, 201 ("urodelen").
Lavocat, A. 1885 A, 34 ("urodèles").
Lebedinsky, N. G. 1917 A, 316 ("unrodeles").
Leboucq, H. 1884 A, 85 ("urodèles").
Leche, W. 1887 A ("urodelen").
Leunis and Ludwig 1883 A, 623.
Leydig, F. 1887 A, 538 ("urodelen").
Lönnberg, E. 1910 A, 4.
Lubosch, W. E. 1908 A, 196 ("urodelen").
Meckel, J. F. 1825 A ("geschwänzte").
Mivart, St. G. 1871 B, 370 ("tailed batrachians").
Moodie, R. L. 1908 B, 361, 366 (Caudata).
1909 C, 118.
1909 D, 243 (Caudata; Euamphibia, in part).
1909 F, 220 (Caudata; Euamphibia, in part).
1912 A, 278 (Euamphibia, in part).
1912 B, 287 (Caudata).
1912 D, 326 (Caudata; Euamphibia, in part).
1915 F, 189, 190 (Caudata).
1915 H, 638.
1916 A, 45, 49 (Caudata; Euamphibia, in part); 45, 69 (Caudata).
Murray, J. A. 1897 A, 661.
Nauck, E. T. 1923 A, 15, figs. 2, 3.
Noble, G. K. 1921 A, 1 ("salamanders").
1922 A, 50, 57, table 1 (Caudata).
1925 C, 1.
Nopcsa, F. 1923 E, 1049, 1056.
1926 A, 643.
Okajima, K. 1908 A, 351 (Onychodactylus).
Oppel, C. A. 1811, Ordn. Rept., 72 (Caudata).
Oswald, F. 1911 A, 405 ("urodeles").
Parker, W. K. 1877 B, 529.
1879 C, 332, 339 ("urodeles").
1887 B, 53 ("urodeles").
Parker and Haswell 1897 A, 272.
Pehrson, T. 1922 A.
Perrin, A. 1896 A, 90 ("urodèles").

Perrin, A. 1899 A, 521 ("urodèles").
Peter, K. 1898 A ("urodelen").
Petronievics, B. 1921 A, 107 ("urodèles").
Pompeckj, J. F. 1912 A, 338, 344 ("urodelen").
Puccioni, N. 1908 A, 56 ("urodeli").
Rabl, C. 1901 A, 496 ("urodelen").
1903 A, 157 ("urodelen").
Reed, H. D. 1920 A, 325.
Reynolds, S. H. 1897 A, 134, 169, 174, 182, 184, 187.
Röse, C. 1894 C, 178-192 ("schwanzmolche").
Romer, A. S. 1922 B, *passim* ("urodeles").
Sabatier, A. 1896 A, 125 ("urodèles").
1897 B, 933 '("urodèles").
1902 A, 99 ("urodèles").
Schauinsland, H. 1906 A, 488 ("urodelen").
Schmalhausen, J. J. 1916 B, 138.
1917 B, 134.
Schönes, G. 1902 A, 8 ("urodelen").
Schuchert, C. 1915 A, 800.
Schwarz, H. 1908 A, 326 ("urodelen").
1908 B, 102 ("urodelen").
Seeley, H. G. 1876 C, 185.
1888 I, 235 ("urodeles").
Sewertzoff, A. 1896 A, 207.
1904 A, 484.
1908 A.
1926 D, 75 ("urodelen").
Seydel, O. 1899 A ("urodelen").
Shitkov, B. M. 1899 A, 246 ("urodelen").
Shore, T. W. 1887 A, 366 ("urodeles").
Sollas, W. J. 1920 A, 484, 524 ("urodeles").
Sonies, F. 1907 A, 405 ("urodelen").
Spencer, W. B. 1886 A, 173 ("urodeles").
Stadtmüller, F. 1925 A, 149-225 ("urodelen").
1926 A, 158, fig. 5 ("urodelen").
Steiner, H. 1921 A, 514 ("urodelen").
1922 A, 328.
Stejneger, L. 1907 C, 2 (Caudata).
Stejneger and Barbour 1917 A, 5 (Caudata).
Stöhr, P. 1880 A, 477.
Stromer, E. 1912 A, 56.
Sushkin, P. P. 1910 A, 241.
1927 A, 275 ("urodelous amphibians").
Taschenberg, O. 1894 A, 3531.
Terra, P. 1911 A, 222 (Caudata).
Thevenin, A. 1910 A, 37 ("urodèles").
Thyng, F. W. 1906 A, 40.
Ussow, S. 1900 A, 226.
Van Gelderen, C. 1925 A, 505 ("urodelen").
Versluys, J. 1912 B, 566 ("urodelen").
1912 C, 314.
1925 B, 182.
Vialleton, L. 1917 A, 190 ("urodèles").
Villiers, C. G. S. 1922 A ("urodelen").
Virchow, H. 1914 C, 132 ("urodelen").
Vitali, G. 1909 A, 208 ("urodeli").
Wagner, R. 1843 A, 146.
Wallace, A. R. 1876 A, ii, 411.
Watson, D. M. S. 1914 D, 168 ("urodeles").
1916 C, 632 ("urodeles").
1917 A, 982 ("urodeles").
1917 B, 57 ("urodeles").
1919 B, 58 ("urodeles").
1926 A, 190, 200.
Wegner, R. N. 1922 A, 417 ("urodelen").
Weitzel, A. 1865 A, 318 ("geschwänztze").
Wilder, I. W. 1920 A, 349 ("urodeles").
Williston, S. W. 1910 D, 534 (Caudata).
1912 B, 660.
1916 B, 211 (Caudata).
Winslow, G. M. 1898 A, 148.
Wintrebert, P. 1910 A, 1081 ("urodèles").
1910 B, 78, 131, 172 (urodèles").
Woodward, A. S. 1898 B, 139.
Zittel and Broili 1911 A, 174.
1923 A, 204.
Zittel, Eastman, etc. 1902 A, 135.

Suborder Proteida Cope.

Cope, E. D. 1866 F, 102.
Arldt, T. 1916 A, 95, 105 ("proteiden").
Blainville, H. M. D. 1835 A, 281 ("protées").
Cope, E. D. 1885 DD, 305.
1889 D, 13, 21.
1891 N, 31.
Dol'o, L. 1884 D, 86.
Dunn, E. R. 1922 A, 425, 427.
Hogg, J. 1841 A, 355 (Proteida).
Huxley, T. H. 1872 A, 150 (Proteida).
1875 C, 759, 770 (Perennibranchiata).
Moodie, R. L. 1916 A, 67.
Müller, J. 1832, Isis, 504 (Proteidea).
Stannius, H. 1856 A, 4 seq. (Proteida).
Stejneger and Barbour 1923 A, 1.
Tschudi, J. J. 1839 A, 26, 96 (Proteideæ).

The Proteidea of Müller is a heterogeneous group containing *Proteus, Axolotl, Menobranchus* (*Necturus*), and *Siren.*

COCYTINIDÆ.

Cope, E. D. 1875 X, 12.
Hay, O. P. 1902 A, 415 (Tuditanidæ, part).
Gregory, W. K. 1917 B, 313 (Cocyctinidæ); 316 (Coccytinidæ).
Moodie, R. L. 1912 D, 326.
1916 A, 67.

Cocytinus Cope. Type *C. gyrinoides* Cope.

Hay, O. P. 1902 A, 416.
Broili, F. 1908 F, 60.
Case, E. C. 1917 A, 134.
1919 B, 200.
Gregory, W. K. 1917 B, 315 (Coccytinus).
Moodie, R. L. 1916 A, 67.
Schwarz, H. 1908 B, 70, 91.

Cocytinus gyrinoides Cope.

Hay, O. P. 1902 A, 416.
Moodie, R. L. 1912 D, 328.
1914 A, 16.
1916 A, 68, figs. 16, 16*a*.
Pennsylvanian (Linton); Ohio.

ERIERPETON Moodie. Type *E. branchialis* Moodie.

Moodie, R. L. 1912 D, 328.
1916 A, 69.

Erierpeton branchialis Moodie.

Moodie, R. L. 1912 D, 326, 329, pl. i, fig. 3; pl. ii, fig. 1.

Moodie, R. L. 1912 A, 278.
1914 A, 18.
1916 A, 70, pl. iii, fig. 4; text-fig. 15.
Pennsylvanian (Mazon Creek); Illinois.

HYPHASMA Cope. Type *H. lævis* Cope.

Hay, O. P. 1902 A, 416.
Broili, F. 1908 F, 59.
Case, E. C. 1917 A, 134.
1919 B, 200.
Moodie, R. L. 1908 F, 255.
1916 A, 70.

Hyphasma lævis Cope.

Hay, O. P. 1902 A, 416.
Baird, S. F. 1876 A, cci.
Moodie, R. L. 1914 A, 20.
1916 A, 71.
Pennsylvanian (Linton); Ohio.

Suborder MEANTES Linnæus.

Linnæus, C. 1766, Syst. Nat. ed. xii, pt. 2, sign. Rrrr 5, Addenda.
Cope, E. D. 1885 BB, 67 (Trachystomata).
1889 D, 13, 223 (Trachystomata).
Dunn, E. R. 1922 A, 427.
Hoffmann, C. K. 1878 B, 674 (Ichthyoidea, in part).
Huxley, T. H. 1875 C, 771 (Trachystomata).
Stannius, H. 1856 A, 4 seq. (Trachystomata).
Stejneger and Barbour 1917 A, 24.
1923 A, 21.

Superfamily SIRENOIDÆ, new name.

SIRENIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 69.
Amalitsky, V. P. 1924 A, 62 (Ichthyoides).
Anton, W. 1911 A, 179 ("sireniden").
Arldt, T. 1907 D, 681.
1916 A, 106 ("sireniden").
Bauer, G. 1885 M.
Bischoff, T. L. W. 1840 A, 3 ("sirènes").
1840 B, 118 ("sirènes").
Blainville, H. M. D. 1835 A, 282 (Sirena).
Bonaparte, C. L. 1832 A, 319.
1833 B, 186.
Boulenger, G. A. 1882 A, 86.
Brauer, A. 1914 A, 284.
Cope, E. D. 1875 X, 12, 24.
1889 D, 223.
1891 N, 31.
Cunningham and Boulenger 1912 A, 164, 169, 170.
Dunn, E. R. 1922 A, 422, 427.
Fejérváry, G. J. 1920 A, 352.
Gadow, H. 1901 B, 136.
Gill, T. 1885 B, 18.
Gray, J. E. 1850 A, 67.
Hoffmann, C. K. 1878 B, 615, 676.
Hogg, J. 1839 A, 274, 375, 376.
1841 A, 362.
Kingsbury, B. F. 1895 A, 131.
Kressmann, M. 1912 A, 399 ("sireniden").
Lobley, J. L. 1908 A, 203.
Noble, G. K. 1922 A, 61.
1924 A, 100.
1925 C, 2.
Owen, R. 1866 A, 15 (Proteidæ).
Palacký, J. 1899 B, 1 ("sirenen").
Pompeckj, J. F. 1912 A, 344.
Reed, H. D. 1920 A, 356.
Schmalhausen, J. J. 1916 B, 144.
Terra, P. 1911 A, 223.
Wallace, A. R. 1876 A, ii, 411.
Wintrebert, P. 1910 B, 173.

SIREN Linnæus. Type *S. lacertina* Linn.

Linnæus, C. 1766, Syst. Nat. Ed. 12 I, ii, sign. Rrrr, Addenda.
Abel, O. 1912 F, 414.
Arldt, T. 1916 A, 106.
Baird, S. F. 1850 B, 291.
Bardeleben, K. 1903 A, 25.
Boulenger, G. A. 1882 A, 86.
Brandt, F. 1865 A, 15.
Carlsson, A. 1886 A, 8.
Carus, V. 1875 A, 484.
Cope, E. D. 1875 D, 361.
1885 CC, 1226.
1885 G, 245 ("sirens").
1899 D, 225.
1900 A, 1214, 1219.
Cuvier, G. 1805 A.
Cuvier, G. 1834 A (1836), x, 332.
Drüner, L. 1904 B, 389.
Dunn, E. R. 1922 A, 420.
1924 A, 145.
Edgeworth, F. H. 1925 A, 231.
Gadow, H. 1901 B, 136.
Gaupp, E. 1913 A, 83.
Giebel, C. G. 1855 A, 99, pl. xlii, fig. 10.
Gill, T. 1886 C, 796.
Goeppert, E. 1896 B, 13, pl. i; text-figs. 13, 14.
Gray, J. E. 1850 A, 68.
Hasse, C. 1873 B, 614, 616.
Hasse and Schwarck 1870 A, 49.
Heilprin, A. 1887 A, 306, 311.
Hertwig, O. 1874 B.
Hoeven, J. v. d. 1866 A, 365.

Hoffmann, C. K. 1874 A, 8, 23, 24.
1878 B, 676, pls. vi, vii.
Hogg, J. 1839 A, 370.
Huxley, T. H. 1863 F, 428.
1872 A, 156, seq.
1874 B, 2, 9.
1875 C, 751-770.
Kingsbury, B. F. 1895 A, 131, pl. iii, figs. 30, 31.
Kingsbury and Reed 1909 A, 598.
Kingsley, J. S. 1925 A, 53, 262, fig. 57.
1902 B, 327, 329.
Klaauw, C. J. 1924 B, 576.
Köstlin, O. 1844 A.
Kressmann, M. 1912 A, 399.
Leunis and Ludwig 1883 A, 630.
Meckel, J. F. 1825 A.
Mivart, St. G. 1870 A, 262.
Noble, G. K. 1925 C, 3.
Norris, H. W. 1913 A, 516.
1913 B, 245.
Owen, R. 1845 B, 188.
1848 B, 125.
1866 A, 47, 179, 391.
1868 A, 908.
Parker, W. K. 1877 B, 572.
1882 C, 186.
Peter, K. 1898 A, 584.
Rabl, C. 1901 A, 511, pl. xxiii.
Reed, H. D. 1920 A, 356, pl. v.
Reynolds, S. H. 1897 A, 135, 168, 169, 174, 180, 187.
Schmalhausen, J. 1917 A, 106.
Sollas, W. J. 1918 A, 239.
Stannius, H. 1856 A, 4, seq.
Sutton, J. B. 1884 A, 567.
Tschudi, J. J. 1839 A, 69.
Vaillant, L. 1863 A, 294.
Versluys, J. 1912 C, 314.
Wagner, R. 1843 A.
Wallace, A. R. 1876 A, ii, 411.
Wiedersheim, R. 1877 B, *passim*.
Wilder, H. H. 1891 A, 653.

Siren lacertina Linnæus.

Linnæus, C. 1766, Syst. Nat. Ed. 12, I, ii. sign. Rrrr, Addenda.
Allis, E. P. 1898 A, 453.
Anthony and Vallois 1914 A, 224, figs. 2, 18.
Anton, W. 1911 A, 191, pls. iv, v.
Baird, S. F. 1850 B, 291.
Bischoff, T. L. W. 1840 A, 3 ("sirène").
1840 B, 119 ("sirène").
Boulenger, G. A. 1882 A, 87.
Cope, E. D. 1875 D, 361, fig. 6.
1885 CC, 1227.
1885 DD, 366, fig. 175.
1889 D, 226, pls. xliii, xliv; text-fig. 57.
1900 A, 1214, 1219.
Cunningham and Boulenger 1912 A, 164, pl. xiv.
Cuvier, G. 1825 A, v, 2, 417, pl. xxvii.
1827 A, 1 ("sirène lacertine").
1834 A (1836), x, 332.
Drüner, L. 1904 B, 648, figs. S, T.
Eimer, G. H. T. 1901 A, 21, 28.
Gadow, H. 1901 B, 136, fig. 27.
Gaupp, E. 1905 D, 955.
Gray, J. E. 1825 A, 216.
1850 A, 68.
Hay, O. P. 1917 E, 43.
1923 A, 382.
Hertwig, O. 1874 B, 14, pl. i, fig. 6.
Kingsbury and Reed 1909 A, 598, pl. ix.
Kressmann, M. 1912 A, 399, pl. xvii; text-figs. 1-16.
Lubosch, W. 1911 B, 741.
Mivart, St. G. 1870 A, 262, figs. 2, 3, 8, 9, 11, 14, 18.
Nopcsa, F. 1923 G, 147.
Norris, H. W. 1913 A, 516.
1913 B, 245, figs. 1-44.
Owen, R. 1845 B, 188, pl. lxii, figs. 5, 6.
1848 B, 125.
1866 A, 47.
Palacký, J. 1899 B, 6.
Parker, W. K. 1882 C, 187, 190, pl. xxxviii, figs. 5, 6; pl. xxxix, figs. 1-3.
Rösé, C. 1894 C, 180, figs. 6-8.
Stejneger and Barbour 1917 A, 24.
Vaillant, L. 1863 A, 294, pls. vii-ix.
Wiedersheim, R. 1877 B, *passim*, pl. i, figs. 10-13; pl. ii, figs. 18-20.
Wilder, H. H. 1891 A, 653, pls. xxxix, xl.
Recent; southern States to Indiana and Peoria, Illinois: Pleistocene; Florida.

Suborder Mutabilia Merrem.

Merrem, B. 1820, Syst. Amphib., 166.
Bonaparte, C. L. 1831 A, 77 (Urodela).
Cope, E. D. 1866 F, 102 (Caducibranchiata).
1889 D, 303 (Pseudosauria, Trematodera, Amphiumoidea).
1889 R, 861 (Pseudosauria).
Drüner, L. 1904 B, 362 ("caducibranchiaten").
Dunn, E. R. 1922 A, 426 (Mutabilia, Salamandroidea).
Hoffmann, C. K. 1878 B, 674 (Ichthyoidea, in part).
Huxley, T. H. 1872 A, 150, 154 (Salamandridæ).
1876 F, 169 (Caducibranchiata).
Parker and Haswell 1897 A, 272 (Derotremata).
Stejneger, L. 1907 C, 3.
Stejneger and Barbour 1917 A, 6.
1923 A, 2.

Superfamily AMPHIUMOIDÆ, new form.

Cope, E. D. 1889 D, 33 (Amphiumoidea, Trematodera).
Stejneger, L. 1907 C, 3 (Amphiumoideæ).
Zittel and Broili 1911 A, 176 (Ichthyoidea).
1923 A, 205 (Ichthyoidea).

LYSOROPHIDÆ Williston.

Williston, S. W. 1908 D, 237, 240.
Abel, O. 1919 A, 326 (Paterosauridæ).
Amalitsky, V. P. 1924 A, 62.
Arldt, T. 1912 A, 656 (Paterosauridæ).
1916 A, 102, 143 ("lysorophiden").
Broili, F. 1904 A, 99 (Paterosauridæ).

Broili, F. 1904 D, 587 (Paterosauridæ).
1908 E, 295 (Paterosauridæ).
Case, E. C. 1911 B, 14, 68, 84, 141.
1915 A, 97.
Huene, F. 1913 B, 374.
1913 G, 505.
1926 A, 262.
Moodie, R. L. 1909 C, 116.
Pompeckj, J. F. 1912 A, 339, 344 (Lysorophidæ, Paterosauridæ).
Sollas, W. J. 1918 A, 239, figs. 4, 5.
1920 A, 482.
Stromer, E. 1912 A, 56 (Paterosauridæ).
Williston, S. W. 1908 F, 317 (Paterosauridæ).
1910 D, 534.
1916 B, 211.
Zittel and Broili 1911 A, 217 (Paterosauridæ).
1923 A, 265, 379, 383 (Paterosauridæ).

Lysorophus Cope. Type *L. tricarinatus* Cope.

Hay, O. P. 1902 A, 433.
Abel, O. 1920 A, 354.
Amalitsky, V. P. 1921 A, 9.
1924 A, 57.
Arldt, T. 1912 A, 656.
1916 A, 102.
Broili, F. 1904 A, 80, 94, 98, text-fig. 5.
1904 D, 586.
1908 B, 269.
1908 E, 290.
1913 A, 98.
1913 B, 520.
1913 D, 350.
Broom, R. 1910 A, 214.
1918 A, 232.
Case, E. C. 1902 C, 257.
1908 A, 531.
1911 B, 14, 68, 84, 141.
1912 A, 203.
1915 A, 131, 132.
Drevermann, F. 1920 A, 101.
Finney, M. 1912 A, 664.
Gilmore, C. W. 1927 G, 11.
Gregory, W. K. 1917 B, 315.
Huene, F. 1913 B, 322, 372, 377.
1913 C, 389.
Jaekel, O. 1909 A, 210.
Kingsley, J. S. 1925 A, 128, fig. 135.
Matthew, W. D. 1923 B, 109.
Mehl, M. G. 1912 C, 408.
Moodie, R. L. 1909 C, 117.
1911 C, 382.
1912 D, 328.
1915 G, 370, 373.
Pompeckj, J. F. 1912 A, 339, 342, 346.
Sollas, W. J. 1918 A, 239, figs. 4, 5.
1920 A.
Steinmann, G. 1908 A, 210.
Stromer, E. 1912 A, 56.
Watson, D. M. S. 1917 C, 170.
Williston, S. W. 1908 D, 230.
1908 F, 317.
Williston, S. W. 1909 A, 394.
1909 E, 194.
1912 B, 660.
1912 F, 92.
1913 A, 825.
1914 C, 59.
1915 A, 578.
1916 B, 211, fig. 54.
Zittel and Broili 1911 A, 218.
1923 A, 266.

Lysorophus tricarinatus Cope.

Hay, O. P. 1902 A, 433.
Abel, O. 1919 A, 326, figs. 249-251.
1920 A, 354, figs. 561, 562.
Broili, F. 1904 A, 94, pl. xii, figs. 1-10.
1904 D, 586, figs. 12-14.
1908 E, 291, figs. 1, 2.
1913 A, 100.
1913 B, 520.
Broom, R. 1918 A, 232, figs. 1-3.
Case, E. C. 1900 A, 714, pl. ii, fig. 12.
1902 A, 45, pl. ix, figs. 1, 2.
1902 C, 256, pl. i, fig. 1.
1908 A, 531, fig. 1.
1911 B, 68, 141, text-figs. 47, 48.
1915 A, 97, 125, text-fig. 13.
Cope and Matthew 1915 A, pl. iii, figs. 19, 20.
Huene, F. 1913 B, 322, figs. 7-10.
1913 C, 393, figs. 1-5.
Jaekel, O. 1909 A, 208, figs. 14, 15.
1911 A, 127, fig. 142.
Moodie, R. L. 1909 C, 117.
1914 A, 21.
Pompeckj, J. F. 1912 A, 338, fig. 1.
Sternberg, C. H. 1909 C, 258.
Williston, S. W. 1908 D, 229, 230, text-figs. 1-3.
1908 F, 316.
Zittel and Broili 1911 A, 218, fig. 357.
1923 A, 265, fig. 373.

Permian (Wichita); Texas: Pennsylvanian (Upper); Illinois.

AMPHIUMIDÆ Gray.

Gray, J. E. 1825 A, 216.
Abel, O. 1919 A, 330.
Arldt, T. 1907 D, 637.
1916 A, 104 ("amphiumiden").
Bonaparte, C. L. 1833 B, 1186.
Boulenger, G. A. 1882 A, 80.
Cope, E. D. 1866 F, 104 (Amphiumidæ); 105 (Protonopsidæ).
1869 B, 152.
1875 X, 12.
1885 DD, 308.
1886 X, 442.
Cope, E. D. 1889 D, 213.
Cunningham and Boulenger 1912 A, 163, 169, 170.
Dunn, E. R. 1922 A, 422, 426.
Gadow, H. 1901 B, 97.
Gill, T. 1885 B, 18.
Gray, J. E. 1850 A, 54.
Hoffmann, C. K. 1878 B, 615, 675.
Huxley, T. H. 1875 C, 770 (Amphiumida).
Kingsbury, B. F. 1895 A, 130.
Kingsley, J. S. 1892 A, 674.
1892 B, 329.
Lobley, J. L. 1908 A, 203.

Lydekker, R. 1890 A, 137.
Noble, G. K. 1922 A, 62 ("amphiumids").
Owen, R. 1868 A, 860 (Amphiuma).
Palacký, J. 1899 B, 1 ("amfiumen").
Reed, H. D. 1920 A, 350, 371.
Ryder, J. A. 1879 C, 14.
Schmalhausen, J. J. 1916 B, 144.
Terra, P. 1911 A, 223.
Wallace, A. R. 1876 A, ii, 412.

Amphiuma Garden. Type *A. means* Garden.

Garden, A. 1821, in Smith's Correspondence of Linnæus, I, 599.
Abel, O. 1912 F, 414.
Adams, L. A. 1919 A, 86, pl. v.
Arldt, T. 1916 A, 104.
Baird, S. F. 1850 B, 290.
Bardeleben, K. 1901 A, 31.
1903 A, 25.
Baur, G. 1885 M.
1897 D, 42.
Boulenger, G. A. 1882 A, 82.
Carus, V. 1875 A, 483.
Cope, E. D. 1866 F, 104.
1869 B, 152.
1875 D, 361.
1885 G. 245 ("amphiuma").
1885 DD, 309.
1886 X, 442.
1889 D, 215.
Cuvier, G. 1827 A, 1.
Davidson, A. 1895 A, 375.
1897 A, 6, figs. 1-7.
Drüner, L. 1904 B, 374.
Dunn, E. R. 1922 A, 420, 422.
1924 A, 145.
Edgeworth, F. H. 1920 A, 128.
1925 A, 231.
Eimer, G. H. T. 1901 A, 256.
Field, H. H. 1895 A, 340, pl. xiii, figs. 16, 18-21.
Gadow, H. 1896 A, 10.
1901 B, 100.
Gaupp, E. 1899 A, 1041.
1905 D, 959.
1906 B.
Giebel, C. G. 1855 A, 98, pl. xlii, fig. 4.
Gray, J. E. 1825 A, 217.
1850 A, 55 (Amphiuma, Murænopsis).
Gregory and Adams 1915 A, 763.
Hay, O. P. 1888 A, 315.
1889 A, 286.
1890 A, 11.
Heilprin, A. 1887 A, 306, 311.
Hertwig, O. 1874 B, 17.
Higgins, G. M. 1920 A, 296.
Hoeven, J. v. d. 1866 A, 367, 375.
Hoffmann, C. K. 1874 A, 8, 18, 24, 30.
1878 B, 675, pls. vi, vii, xv.
Hogg, J. 1839 A, 370.
Howes, G. B. 1893 B, 278.
Huxley, T. C. 1872 A, 157 seq.
1874 B, 9, 12.
1875 C, 758.
Kingsbury, B. F. 1903 A, 331.
Kingsbury and Reed 1908 A, 82.
1909 A, 596.
Kingsley, J. S. 1892 A, 671.
1897 A, 436.
1900 A, 211.
1901 B, 337. 1902 A.
Kingsley, J. S. 1902 B, 323.
1912 B, 82, fig. 82.
1925 A, 124, fig. 131.
Kingsley and Ruddick 1889 A, 219.
Klaauw, C. J. 1924 B, 577.
Köstlin, O. 1844 A.
Kravetz, L. 1911 A, 360.
Kressman, M. 1912 A, 426.
Leunis and Ludwig 1883 A, 629.
Meyer, H. 1860 E, 50.
Mivart, St. G. 1870 A, 262.
Nopcsa, F. 1923 G, 124, 147.
Norris, H. W. 1903 A, 69.
1908 A, 527.
1913 A, 517.
Owen, R. 1845 B, 190.
1848 B, 102, 125, 199, pl. ii.
1866 A, 5, 163, 170, 182, fig. 101.
1868 A, 860.
Parker, W. K. 1882 D, 209.
Parker and Haswell 1897 A, 274, fig. 888.
Peter, K. 1898 A, 569, 597.
Rabl, C. 1901 A, 509, pl. xxiii.
Reed, H. D. 1920 A, 351, pl. iii, text-figs. 15, 16.
Reynolds, S. H. 1897 A, 135, 174, 187, 188.
Ryder, J. A. 1879 C, 14 (Amphiuma, Murænopsis).
1887 A, 365.
Schauinsland, H. 1906 A, 498.
1916 A, 110.
Sollas, W. J. 1920 A, 499.
Stannius, H. 1856 A, 4, seq.
Thyng, F. W. 1906 A, 47, fig. D.
Van Pee, P. 1903 A, 37, figs. 1-5.
1904 A, 476.
Versluys, J. 1912 C, 314.
Wagner, R. 1843 A.
Watson, D. M. S. 1916 C, 632.
Wiedersheim, R. 1877 A.
1877 B, *passim.*
1902 A, 47, pl. vi, fig. 4.
Winslow, G. M. 1898 A, 149, 180.

Amphiuma means Garden.

Garden, A. 1821, in Smith's Correspondence of Linnæus, I, 599 (descrip. 333).
Anton, W. 1911 A, 184.
Baird, S. F. 1850 B, 290 (A. means, A. tridactylum).
Boulenger, G. A. 1882 A, 82 (A. tridactyla); 83 (A. means).
Cope, E. D. 1875 D, 353, fig. 1.
1885 DD, 308.
1886 X, 442, pl. vi.
1889 D, 216, pl. ix, fig. 7; pl. x; pl. xi, figs. 2-9; pl. xii; pl. xiii, fig. 5; text-figs. 55, 56.
Cunningham and Boulenger 1912 A, 163, pl. xiv.
Cuvier, G. 1825 A, v, 2, 419, pl. xxvii.

Cuvier, G. 1827 A, 4, pl. i, figs. 1-3, pl. ii, figs. 1-8, 15-18 (A. means); 7, pl. i, figs. 4-6; pl. ii, figs. 9-14 (A. tridactylum).
Davidson, A. 1895 A, 375, pls. xxiii, xxiv.
Drüner, L. 1904 B, 626, pl. xxiii (A. tridactylum).
Edgeworth, F. H. 1925 A, 229 (A. tridactylum).
Gadow, H. 1901 B, 100, fig. 18.
Gray, J. E. 1825 A, 217.
1850 A, 55 (A. means, Muræ nopsis tridactyla).
Hay, O. P. 1888 A, 315.
1889 A, 286.
1890 A, 11, pl. ii.
1917 E, 43.
1923 A, 382.
Holbrook, J. E. 1842, N. Amer. Reptiles, v, 89, pl. xxx.
Kingsbury, B. F. 1903 A, 325.
Kingsbury and Reed 1909 A, 596, text-figs. 18-21.
Kingsley, J. S. 1892 A, 671.
Mivart, St. G. 1870 A, 262, figs. 1, 4, 5, 7, 16, 17, 19.
Morgan, T. H. 1903 A, 293.
Norris, H. W. 1908 A, 527, pls. iv-viii.
Owen, R. 1845 B, 191, pl. lxii, fig. 7 (A. means, A. tridactylum).
1866 A, 182 (A. tridactylum).
Palacký, J. 1899 B, 6 (Anfiuma).
Röse, C. 1894 C, 180, figs. 3, 11.
Shufeldt, R. W. 1883 D, 159, figs. 1-4 (Muræ nopsis tridactylus).
Wiedersheim, R. 1877 A, pls.
1877 B, *passim*, pl. i, figs. 7-9; pl. ii, fig. 17; pl. iv (A. tridactylum).
Wilder, H. H. 1891 A, 654 (A. tridactyla).
Winslow, G. M. 1898 A, 164.
Recent; Virginia to Florida and Louisiana: Pleistocene; Florida.

CRYPTOBRANCHIDÆ Cope.

Cope, E. D. 1889 D, 33, 34, 36.
Amalitsky, V. P. 1924 A, 62 (Ichthyoides).
Bauer, G. 1885 M (Menopomidæ).
Beyer, H. 1907 A, 268 ("menopomiden").
Carus, V. 1875 A, 483 (Cryptobranchia).
Dunn, E. R. 1922 A, 423, 424, 427.
Hoffmann, C. K. 1878 B, 674 (Menopomidæ).
Hogg, J. 1839 A, 274, 374, 375 (Menopomatidæ).
1841 A, 355 (Derotremata).
Kingsbury, B. F. 1895 A, 123.
Kingsbury and Reed 1909 A, 591.
Lobley, J. L. 1908 A, 203 (Menopomidæ).
Müller, J. 1832 A, 504 (Derotremata).
Noble, G. K. 1922 A, 49, 61.
1925 C, 1.
Reed, H. D. 1920 A, 327, 366.
Stejneger, L. 1907 C, 3.
Stejneger and Barbour 1917 A, 7.
Terra, P. 1911 A, 223 (Menopomidæ).
Wallace, A. R. 1876 A, ii, 412 (Menopomidæ).
Zittel, K. A. 1890 A, 418 (Cryptobranchia).

CRYPTOBRANCHUS Leuckart. Type *C. alleganiensis* Daudin.

Leuckart, C. G. F. R. 1821, Isis, Lit. Anz., 259.
Adams, L. A. 1919 A, 85, pl. v.
Altmann, F. 1925 A, 87.
Anton, W. 1911 A, 184.
Arldt, T. 1916 A, 104.
Beer, G. R. 1926 A, 308.
Beyer, H. 1907 A, 268 (Menopoma).
Boulenger, G. A. 1882 A, 81.
Bronn, H. G. 1838 A, 1166.
Cope, E. D. 1866 F, 105 (Protonopsis).
1875 D, 363 (Protonopsis).
1889 D, 37.
Drüner, L. 1904 B, 374 (Cryptobranchus, Menopoma).
Dunn, E. R. 1922 A, 419.
Edgeworth, F. H. 1920 A, 128, figs. 32-56 (Menopoma).
1923 B, 97, figs. 1-10 (Cryptobranchus, Menopoma).
1923 C, 238, figs. 1-7 (Cryptobranchus, Menopoma).
1925 A, 229, figs. 53-63 (Cryptobranchus, Menopoma).
Emery, C. 1901 A, 673, fig. 12.
Field, H. H. 1895 A.
Fleissig, J. 1909 A, 48, figs. 1-5.
Forbes, W. A. 1879 A, 364 ("menopoma").
Frasetto, F. 1915 A, 16, 149, fig. 89.
Gadow, H. 1896 A, 10, fig. 14 (Menopoma, Cryptobranchus).
1901 B, 97.
Gaupp, E. 1898 B, 866.
1899 A, 1041 (Menopoma).
1905 D, 931, 955, figs. 20, 21 (Cryptobranchus, Menopoma).
1913 A, 85.
Giebel, C. G. 1855 A, 98 (Menopoma).
Gray, J. E. 1825 A, 217 (Abranchus).
1850 A, 53 (Protonopsis).
Gregory, W. K. 1920 A, 224.
Harlan, R. 1825, Ann. Lyc. Nat. Hist. N. Y., i, 270 (Menopoma).
Hase, A. 1913 A, 149, fig. 71 (Menopoma).
Hatcher, J. B. 1903 A, 20 (Menopoma).
Heilprin, A. 1887 A, 306, 311 (Menopoma).
Hertwig, O. 1874 B, 17 (Menopoma).
Higgins, G. M. 1920 A, 294.
Hoeven, J. v. d. 1866 A, 367, 371 (Menopoma, Cryptobranchus).
Hoffmann, C. K. 1874 A, 17, 22, 24, 29 (Cryptobranchus, Menopoma).
1878 B, 674, pls. i, ii, vi-xiv (Menopoma, Cryptobranchus).
Hogg, J. 1839 A, 370 (Menopoma).
Holbrook, J. E. 1842 (1844), N. Amer. Rept., v, 95 (Menopoma).
Howes, G. B. 1893 B, 271.
Huxley, T. H. 1874 B, 9, 12 (Menopoma).
1875 A, 40 (Menopoma).
1875 C, 752-770, figs. 1-3 (Cryptobranchus, Menopoma).
1877 A, 58 (Menopoma).

Iwanzoff, N. 1894 A, 582 (Menopoma).
Kesteven, H. 1916 A, 305.
1919 A, 224, fig. 2.
Kingsbury, B. F. 1895 A, 123.
1903 A, 326.
Kingsbury and Reed 1909 A, 591.
Kingsley, J. S. 1900 A, 211.
1925 A, 263, figs. 44, 132, 281, 302.
Klaauw, C. J. 1924 B, 574 (Menopoma).
Köstlin, O. 1844 A (Menopoma).
Kressman, M. 1912 A, 426.
Lakjer, T. 1927 A, 332 (Cryptobranchus, Menopoma).
Leunis and Ludwig 1883 A, 629 (Menopoma, Cryptobranchus).
Lobley, J. L. 1908 A, 214 (Menopoma).
Lubosch, W. 1911 B, 741 (Menopoma).
Lubsen, J. 1905 A, 432, figs. 1-3.
Malbranc, M. 1875 A (Menopoma, Cryptobranchus).
Meyer, H. 1860 E, 50 (Menopoma).
Mivart, St. G. 1870 A, 264 (Cryptobranchus, Menopoma).
Mivart and Clark 1879 A, 524, text-fig. 5.
Moodie, R. L. 1907 A, 90 (Menopoma).
1915 F, 189.
Noble, G. K. 1922 A, 47.
1925 C, 1.
Osawa, G. 1901 A, 225-427, pls. xi-liv.
Owen, R. 1845 B, 191 (Menopoma, Sieboldtia).
1848 B, 50, 159, fig. 28 (Menopoma).
1866 A, 48, 170, 390, figs. 43, 265.
Parker, W. K. 1877 B, 571 (Menopoma).
1879 C, 335 (Menopoma).
1882 C, 172, pls. xxxvi, xxxvii (Sieboldia); 178 (Menopoma).
1882 D, 208, 209 (Cryptobranchus, Menopoma).
Parker and Bettany 1877 A, 131 (Menopoma).
Parker and Haswell 1897 A, 274.
Peter, K. 1898 A, 577, 584 (Menopoma).
Petronievics, B. 1921 A, 107 ("cryptobranches").
Rabl, C. 1901 A, 498, pl. xxiii (Cryptobranchus, Menopoma).
Reynolds, S. H. 1897 A, 135, 175.
Romer, A. S. 1922 B, 562, 569.
Schmalhausen, J. 1910 A, 439.
1917 B, 134 (Cryptobranchus, Menopoma).
Schöne, G. 1902 A, 8.
Seeley, H. G. 1876 A, 175, 185 (Menopoma).
Sewertzoff, A. N. 1908 A.
Shimada, K. 1911 A, 1-9, pls. i-iv.
Sollas, W. J. 1916 A, 110.
1920 A, 518, 524.
Stannius, H. 1856 A, 4, seq. (Menopoma).
Steiner, H. 1921 A, 519.
1922 A, 340.
Stejneger, L. 1901 A, 308.
Stejneger and Barbour 1917 A, 7.
Taschenberg, O. 1894 A, 3536.
Versluys, J. 1912 C, 323.
Villiers, C. G. S. 1922 A, 166 (Menopoma).
Wagner, R. 1843 A (Menopoma).
Watson, D. M. S. 1916 C, 632.
1917 B, 57.
Wiedersheim, R. 1877 B, *passim*.
1877 C, 152 (Menopoma, Cryptobranchus).
Wiedersheim, R. 1880 D, 582 (Menopoma, Cryptobranchus).
1892 A, 48, pl. vi, fig. 5 (Menopoma).
Wiman, C. 1923 B, 275, fig. 3.
Woodward, A. S. 1904 D, 142.
Zittel and Broili 1911 A, 176.
1923 A, 205, fig. 311.
Zwick, W. 1897 A, 65, fig. 2 (Menopoma).

Cryptobranchus alleganiensis (Daudin).

Daudin, F. M. 1802, Hist. Nat. Rept., viii, 231 (Salamandra).
Anton, W. 1911 A, 195 (Menopoma alleghaniense).
Beyer, H. 1907 A, 269 (Menopoma).
Boulenger, G. A. 1882 A, 81 (C. alleghaniensis).
Cope, E. D. 1869 E, 178 ("Menopoma." This species?).
1875 D, 363, fig. 8 (Protonopsis horrida).
1875 X, 25 (Menopoma allegheniensis).
1885 DD, 308, fig. 177 (Protonopsis horrida).
1889 D, 38, pls. v-viii, text-fig. 5 (C. allegheniensis).
Cunningham and Boulenger 1912 A, 163 (C. alleghaniensis).
Cuvier, G. 1825 A, v, 2, 409, pl. xxvi (Salamander gigantea).
Drüner, L. 1904 B, 443, pl. xiv, fig. 1; pls. xxi, xxii; text-fig. F (Menopoma alleghaniense).
Gadow, H. 1901 B, 97, fig. 17 (C. alleghaniensis).
Gaupp, E. 1899 A, 1041, fig. 4 (Menopoma alleghaniense).
Gray, J. E. 1825 A, 217 (Abranchus alleganensis).
1850 A, 57 (Protonopsis horrida).
Hatcher, J. B. 1903 A, 21, fig. 5 (Menopoma allegheniensis).
Hoeven, J. v. d. 1866 A, 371 (C. alleghaniensis).
Holbrook, J. E. 1842 (1844), N. Amer. Rept., v, 95, pl. xxxii (Menopoma alleghaniensis).
Kingsbury, B. F. 1895 A, 123, pl. v, figs. 39, 40.
Kingsbury and Reed 1909 A, 591, pls. vii, viii (C. allegheniensis).
Low, J. W. 1926 A, 913, figs. 1-4 (Menopoma).
Mivart, St. G. 1870 A, 264 ("Menopoma").
Owen, R. 1845 B, 191, pl. lxii, fig. 1 (Menopoma alleghanniense).
Palacký, J. 1899 B, 6 (C. aleganiensis).
Parker, W. K. 1882 C, 178 pl. xxxviii, figs. 1-3; pl. xxxix, figs. 4-6 (Menopoma alleghaniensis).
Pompeckj, J. F. 1912 A, 341.
Reese, A. M. 1906 A, 287, figs. 1-14 (C. allegheniensis).
Wiedersheim, R. 1877 B, *passim*, pl. ii, figs. 23-25 (Cryptobranchus, Menopoma alleghaniense).
1877 C, 153, figs. 3-5 ("menopoma").
Wilder, H. H. 1891 A, 654 (Menopoma alleg.).
Recent; eastern United States: Pleistocene (Cave deposits); West Virginia.

Cryptobranchus sp. indet.

Hay, O. P. 1923 A, 322, 353. Pleistocene; Pennsylvania, Virginia.
Peterson, O. A. 1926 A, 251, text-fig. 1. Pleistocene; Pennsylvania.

PLICAGNATHUS Cook. Type *P. matthewi* Cook.

Cook, H. J. 1917 A, 213.
Matthew, W. D. 1918 A, 188, 226.
Zittel and Broili 1923 A, 206.

Plicagnathus matthewi Cook.

Cook, H. J. 1917 A, 213.
Matthew, W. D. 1918 A, 188, 226.
1924 C, 68.
Upper Miocene (Lower Snake Creek); Nebraska.

SALAMANDROIDÆ, new form.

Cope, E. D. 1889 D, 33 (Pseudosaura).
Stejneger, L. 1907 A, 11 (Salamandroideæ).

AMBYSTOMIDÆ Stejneger.

Stejneger, L. 1907 A, 25.
Arldt, T. 1907 D, 637 (Amblystomidæ).
1916 A, 112 ("amblystomatinen").
Boulenger, G. A. 1882 A, 31 (Amblystomatinæ).
Cope, E. D. 1859 A, 122 (Amblystomatinæ).
1866 F, 105 (Amblystomidæ).
1868 N, 166 (Amblystomatinæ).
1885 DD, 311 (Amblystomidæ).
1889 A, 33, 45 (Amblystomidæ).
Cunningham and Boulenger 1912 A, 163, 168 (Amblystomatinæ).
Dunn, E. R. 1922 A, 423, 426.
Fejérváry, G. J. 1920 A, 352 (Amblystomidæ).
Gadow, H. 1901 B, 109 (Amblystomatinæ).
1905 A, 200 (Amblystomatinæ).
Gill, T. 1885 B, 18 (Amblystomidæ).
Hallowell, E. 1858, Jour. Acad. Nat. Sci., Phila. (2), iii (Amblystomidæ).
Kingsbury, B. F. 1895 A, 124 (Amblystomidæ).
Kingsbury and Reed 1909 A, 554 (Amblystomidæ).
Klaauw, C. J. 1924 B, 576 (Amblystomidæ).
Noble, G. K. 1922 A, 62 ("ambystomids").
1926 A, 1 (Ambystomidæ).
Palacký, J. 1899 B, i, 1 ("amblystomatiden").
Pompeckj, J. F. 1912 A, 340 ("amblystomatinen").
Reed, H. D. 1920 A, 326, 367 (Amblystomidæ).
Steiner, H. 1921 A, 520 (Amblystomatinæ).
Stejneger, L. 1907 C, 24.

AMBYSTOMA Tschudi. Type *Lacerta maculata* Shaw.

Tschudi, J. J. 1838, mém. Soc. Nat. Neuchâtel, 92.
Adams, L. A. 1919 A, pl. v (Amblystoma).
Albrecht, P. 1883 C, 196, figs. 2, 3 ("siredon").
Allis, E. P. 1909 A, 53 (Amblystoma).
1915 A, 616 (Amblystoma).
Altmann, F. 1925 A, 89 (Amblystoma).
Arldt, T. 1916 A, 113 (Amblystoma).
Baird, S. F. 1850 B, 281 (Amblystoma).
Beyer, H. 1907 A, 268 (Siredon).
Boulenger, G. A. 1882 A, 38 (Amblystoma).
Carlin, W. E. 1881 A, 120 (Siredon, Amblystoma).
Cope, E. D. 1859 A, 123 (Amblystoma).
1868 N, 167 (Amblystoma).
1875 D, 363 (Amblystoma).
1885 DD, 311 (Amblystoma).
1889 D, 47 (Amblystoma).
Cunningham and Boulenger 1912 A, 180, 213 (Amblystoma).
Cuvier, G. 1825 A, v, 2, 415, pl. xxvii ("axolotl").
Drüner, L. 1904 B, 509, pl. xiv, fig. 2; pls. xv, xvi, xx; text-figs. A, G (Amblystoma).
Dunn, E. R. 1922 A, 420.
1923 A, 133 ("ambystomid").
Edgeworth, F. H. 1920 A, 123 (Sirodon).
1925 A, 227, 231. fig. 41 (Amblystoma, Sirodon).
Fejérváry, G. J. 1921 C, 3 (Amblystoma).
Field, H. H. 1895 A, 341 (Amblystoma).
Gadow, H. 1896 A, 10 (Siredon).
1901 B, 109 (Amblystoma).
1905 A, 200 (Amblystoma).
Gaupp, E. 1898 B, 850 (Siredon).
1899 A, 1041 (Siredon).
1905 D, 947, fig. 14.
Gaupp, E. 1913 A, 44, figs. 15, 42 (Amblystoma).
Gegenbaur, C. 1862 A, 180, 192 (Siredon).
Giebel, C. G. 1855 A, 98 (Amblystoma).
Goeppert, E. 1896 B, 12, fig. 12 (Siredon).
Goodrich, E. S. 1911 A, 103, figs. 29-51 (Amblystoma).
Gray, J. E 1850 A, 34.
Gregory, W. K. 1920 A, 117, fig. 22 (Amblystoma).
Gregory, Miner and Noble 1922 A, 283, figs. 2, 3.
Grote, A. 1926 A, 458, figs. 1-6 (Siredon).
Hanson, F. B. 1919 B, 68, fig. 22.
Hasse, C. 1873 B, 611, pl. xix (Siredon).
1873 D, 679 (Siredon).
1892 C, 17 ("axolotl").
Hasse and Schwarck 1870 A, 49 (Siredon).
Hay, O. P. 1889 B, 602 (Amblystoma).
Heilprin, A. 1887 A, 306 (Amblystoma).
Hertwig, O. 1874 B, pls. i-v (Siredon).
Higgins, G. M. 1920 A, 293 (Amblystoma).
Hoeven, J. v. d. 1866 A, 365 ("axolotl").
Hoffmann, C. K. 1874 A (Amblystoma, Siredon).
1878 B, 666, pls. viii, x (Amblystoma, Siredon).
Hucne, F. 1922 G, 455.
Huxley, T. H. 1863 F, 429 (Siredon).
1872 A, 156, 161, fig. 58 (Siredon)
1874 B, 13 (Amblystoma).
1875 A, 45 (Siredon).
1875 C, 760 (Amblystoma).
Iwanzoff, N. 1894 A, 582 (Siredon).
Jaquet, M. 1897 A, 174 (Axolotl).
1898 B, 321, figs. 60, 61 (Axolotl).
1899 B, 189, pls. xli-xlv (Axolotl).
Kehrer, F. A. 1896 A, 352 (Amblystoma).
Kerr, J. G. 1902 A, 425 (Amblystoma).
Kesteven, H. L. 1919 A, 224 (Amblystoma)

Kingsbury, B. F. 1895 A, 124, pls. i, ii (Amblystoma).
1903 A, 326 (Amblystoma).
Kingsbury and Reed 1908 A, 82, 83, figs. 1-7.
1909 A, 554, 609, pls. i-iv.
Kingsley, J. S. 1900 A, 210 (Amblystoma).
1902 B, 329, 337 (Amblystoma).
1912 B, 44, 48, 84, figs. 37, 43, 84.
1925 A, 38, 125, 126, figs. 43, 132, 133 (Amblystoma).
Kupffer, C. 1893 A, 546 (Amblystoma).
Lebedinsky, N. G. 1917 A, 316 (Amblystoma).
Leunis and Ludwig 1883 A (Amblystoma).
Malbranc, M. 1875 A (Siredon).
Meyer, H. 1860 E, 48 (Siredon).
Miner, R. W. 1925 A, 171, 174, 179 (Amblystoma).
Mivart, St. G. 1870 A, 264 (Amblystoma).
1874 B, 182, fig. 61 ("axolotl").
Moodie, R. L. 1908 G, 519.
Noble, G. K. 1921 A, 3.
1925 C, 1.
1926 A, 1.
Owen, R. 1844 C, 23, fig. (Axolotes).
1845 B, 189, pl. lxii, fig. 4 (Axolotes).
1866 A, 87 (Axolotes).
Parker, W. K. 1877 B, 529, pls. xxi-xxvii (Amblystoma).
1882 D, 209 (Amblystoma).
Parker and Bettany 1877 A, 122 (Amblystoma).
Parker and Haswell 1897 A, 278, 289, 891, 896 (Amblystoma).
Peter, K. 1898 A, 587 (Siredon).
Rabl, C. 1901 A, 513 ("axolotl").
Reed, H. D. 1920 A, 325 (Amblystoma).
Retterer, E. 1908 A, 486 ("axolotl").
1908 B, 537 ("axolotl").
Reynolds, S. H. 1897 A, 135, 175 (Amblystoma).
Röse, C. 1894 C, 180 (Amblystoma).
Schmalhausen, J. J. 1916 B, 139 (Siredon).
1910 A, 439 (Amblystoma).
Scott, P. G. 1916 A, 309 (Amblystoma).
Sewertzoff, A. N. 1896 A, 245 (Siredon).
1908 A, 171, 345 (Siredon); 359 (Amblystoma).
Sirena, S. 1872 A, 125, 134 (Siredon).
Stadtmüller, F. 1926 A, 159, fig. 5 (Amblystoma).
Stannius, H. 1856 A (Siredon).
Steiner, H. 1921 A, 516, 520, figs. 1, 8, 14.
1922 A, 317, 331, 340 (Amblystoma).
Stöhr, P. 1880 A, 487, 504 (Siredon).
Sutton, J. B. 1884 A, 567 (Siredon).
Taschenberg, O. 1894 A, 3530 (Amblystoma).
Terry, R. J. 1906 A, 95 (Amblystoma).
Versluys, J. 1912 C, 318, figs. 7, 18.
Wallace, A. R. 1876 A, ii, 413 (Amblystoma).
Wegner, R. N. 1922 A, 417 (Amblystoma).
Wiedersheim, R. 1877 A, pls. (Amblystoma).
1877 B, *passim*, pl. i, fig. 6; pl. iii, figs. 28-34, 36, 44; pl. v, fig. 73 ("axolotl"); pl. v, figs. 75-77 (Amblystoma).
1879 A, 216, pls. xi, xii (Amblystoma).
1880 D, 581, pl. xxx ("axolotl").
Wilder, I. W. 1920 A, 349.
Winslow, G. M. 1898 A, 150, figs. 1-13 (Amblystoma).
Wintrebert, P. 1910 A, 178, 419 (Amblystoma).
1910 B, 129 ("axolotl").
Zwick, W. 1897 A, 66 (Siredon).

Ambystoma? sp. indet.

Brown, B. 1908 A, 206, pl. xxii (Amblystoma?). Pleistocene; Arkansas.

PLETHODONTIDÆ Gray.

Gray, J. E. 1850, Cat. Batr. Grad. Brit. Mus, 31.
Boulenger, G. A. 1882 A, 51 (Plethodontinæ).
Cope, E. D. 1889 D, 33, 119, 523.
Noble, G. K. 1925 C, 3.
Noble, G. K. 1927 A, 1, figs. 1-10.
Peterson, O. A. 1926 A, 251.
Stejneger and Barbour 1923 A, 8.
Peterson, O. A. 1926 A, 251. Pleistocene; Pennsylvania.

UNDETERMINED GENUS AND SPECIES OF PLETHODONTIDÆ.

Desmognathus sp. indet.

Peterson, O. A. 1926 A, 252 (This genus?). Pleistocene; Pennsylvania.

SALAMANDRIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 68.
Abel, O. 1919 A, 330.
1921 A, 252 ("salamandern").
Albrecht, P. 1883 C, 196, fig. 4 (Salamandra).
Allis, E. P. 1919 E, 368 (Salamandra).
Altmann, F. 1925 A, 88, figs. 1-5 (Salamandra).
Anton, W. 1911 A, 179 ("salamandriden").
Arldt, T. 1916 A, 105 ("salamandriden").
Beer, G. R. 1926 A, 308, figs. 73-75 (Salamandra).
Bischoff, T. L. W. 1840 B, 114 ("salamandres").
Blainville, H. M. D. 1835 A, 281 ("salamandres").
Bolk, L. 1913 A, 115, fig. 74 (Triton).
Carus, V. 1875 A, 481 (Salamandrina).
Cope, E. D. 1859 A, 122.
1885 DD, 315.
Cunningham and Boulenger 1912 A, 161, 168.
Cuvier, G. 1805 A ("salamandres").
1825 A, v, 2, 406, pl. xxv ("salamandres").
Dollo, L. 1884 D, 91.
Drüner, L. 1904 B, 362 (Salamandra).
Dunn, E. R. 1922 A.
1923 A, 132.
Frassetto, F. 1915 A, figs. 7, 13 (Salamandra).
Gadow, H. 1896 A, 4, figs. 1-3, 9-13 (Salamandra, Triton).
1901 B, 102.
Gaupp, E. 1899 A, 1042 (Ranodon).
1900 A, 566 ("triton").
1902 A, 168, fig. 3 (Triton).
1905 D, 931, 936, figs. 9-13 ("salamandriden").
Gegenbaur, C. 1862 A, 180 (Salamandra).
1867 B, 396 ("salamandriden").

Geoffroy St. Hilaire, E. F. 1832 A, 351 ("salamandres").
Gervais, P. 1859 A, 498 ("salamandrides").
Goeppert, E. 1896 B, 5, figs. 4-11 (Salamandra, Triton).
Gray, J. E. 1825 A, 215.
Grote, A. 1926 A, 484 (Salamandra).
Hase, A. 1913 A, fig. 50.
Hasse, C. 1873 B, 615 (Salamandrinæ).
1892 A, 254 ("salamandrinen").
1892 C, 1 (Triton).
Hasse and Schwarck 1870 A, 35, 50 ("salamandriden").
Hatschek, B. 1889 A, 84, fig. 2 ("salamander").
Henshaw, H. W. 1912 A, 318 ("salamanders").
Hertwig, O. 1874 B, pls. i-v ("salamandrinen").
Hilzheimer, M. 1913 A, 473 ("salamandriden").
Hoeven, J. v. d. 1866 A, 364 (Salamandra).
Hoffmann, C. K. 1874 A (Salamandra).
1878 B, 666 (Salamandrida).
Hofmann, K. 1923 A, 432 (Salamandra).
Hogg, J. 1839 A, 274.
1841 A, 361.
Howes, G. B. 1893 B, 276 (Salamandra).
Huxley, T. H. 1859 D, 403 (Triton).
1863 C, 569 ("salamander").
1874 B, 14 ("salamanders").
1875 A, 45 (Triton).
1875 C, 760 (Salamandrida).
1879 A, pl. iii (Salamandra).
Iwanzoff, N. 1894 A, 582 (Salamandra).
Jaekel, O. 1909 D, 722 (Triton).
Kapelkin, W. 1900 A, pls. v, vi (Salamandra, Triton).
Kehrer, F. A. 1896 A, 352 ("salamandriden").
Kerbert, C. 1876 A, 215 (Triton).
Kingsbury and Reed 1908 A, 88.
Kingsley, J. S. 1901 B, 337 (Salamandrina).
1925 A, 246 (Salamandrina).
Klaauw, C. J. 1924 B, 576 (Salamander).
Klintz, J. H. 1911 A, 165 (Salamandra).
Köstlin, O. 1844 A ("Salamander").
Kupffer, C. 1893 A, 530 (Salamandra, Triton).
Lavocat, A. 1885 A, 33 ("salamandres").
Leunis and Ludwig 1883 A, 624 (Mecodonta).
Leydig, F. 1890 A, 465 (Salamandra).
Lobley, J. L. 1908 A, 203, 209.
Loomis, F. B. 1919 A, 217.
Malbranc, M. 1875 A (Salamandrina).
Meckel, J. F. 1825 A ("salamander").
Meyer, H. 1860 E, 47 ("salamandriden").
Mivart, St. G. 1870 A, 264, fig. 12.
Mivart and Clarke 1879 A, 524, text-fig. 6 (Salamandra).
Mollier, S. 1895 B, 2 (Salamandra).
Nauck, E. T. 1926 B, 38, 75, figs. 6, 7 (Triton).
Noble, G. K. 1922 A, 62 ("salamandrids").
Nopcsa, F. 1923 B, 354 ("molche").
Oken, L. 1823 B, 445 ("lurche").
Owen, R. 1845 B, 193 ("newts").
1866 A.
1868 A, 907.
Palacký, J. 1899 B, 1 ("salamandriden").
Paramore, R. H. 1910 A, 1395 ("salamander").
Parker, W. K. 1882 C, 195, 197, pls. xl, xli ("newts").
Parker and Bettany 1877 A, 134 (Triton).
Parker and Haswell 1897 A, 280, figs. 893, 896, 897.
Perrin, A. 1899 A, 522, fig. 2 (Triton).
Peter, K. 1898 A ("salamandriden").
Petronievics, B. 1921 A, 107, 109 ("salamandrines").
Pompeckj, J. F. 1912 A, 340.
Rabl, C. 1901 A, 500 (Triton).
Reichert, K. B. 1849 A, 510 ("tritonen").
Retterer, E. 1908 A, 487 ("salamandre").
1908 B, 537 ("salamandre").
Reynolds, S. H. 1897 A, 135, 175, 182 (Salamandrina).
Röse, C. 1894 C, 180 (Triton).
Schmalhausen, J. J. 1910 A, 431 (Salamandrella).
1916 B, 143 (Triton).
1917 B, 130 ("tritons").
Sewertzoff, A. N. 1908 A, figs 16, 17 (Triton).
1926 D, 84 (Salamandrella).
Seydel, O. 1899 A (Salamandra).
Sirena, S. 1872 A, 126, 134 (Triton).
Stadtmüller, F. 1925 A, figs. 1-41 (Salamandra).
1926 A, 157, figs. 3-5 (Salamandra).
Stannius, H. 1856 A, 4, seq. (Salamandra).
Steiner, H. 1921 A, 520.
Stejneger, L. 1907 C, 11.
Stöhr, P. 1880 A, pls. xxix, xxx (Triton, Salamandra).
Strasser, H. 1879 A, 240 ("salamander").
Tarapani, H. 1909 A, 57 (Salamandra, Triton).
Taschenberg, O. 1894 A, 3543.
Terra, P. 1911 A, 224.
Tomes, C. S. 1875 A, 94 ("newt").
Versluys, J. 1912 C, 313, figs. 3, 5, 6, 9, 22 (Salamandra).
Villiers, C. G. S. 1922 A, 191 ("salamandriden").
Vitali, G. 1909 A, 208 (Triton).
Wagner, R. 1843 A ("salamander").
Wallace, A. R. 1876 A, ii, 413.
Wiedersheim, R. 1880 A, 26 ("salamandriden").
1892 A, 48 ("salamandrinen").
Wintrebert, P. 1910 A, 300 ("salamander").
1910 B, 78, 173 ("salamandrides").
Zittel and Broili 1911 A, 176 (Salamandrina).
1923 A, 206 (Salamandrina).
Zwick, W. 1897 A, 69 (Triton, Salamandra).

Ototriton formerly assigned to this family is now referred to the reptilian family Amphisbænidæ.

Order SALIENTIA Laurenti.

Unless otherwise indicated the authors quoted employ the name *Anura*.

Laurenti, J. N. 1768, Syn. Rept., 24.
Hay, O. P. 1902 A, 424 (Salientia).
Abel, O. 1919 A, 311.
1920 A, 346.
1921 A, 144 ("anuren").
Adams, L. A. 1919 A, 145.
Agassiz, L. 1844 D, 137 ("batracians").
Albrecht, P. 1883 C, 195 ("anoures").
Allis, E. P. 1923 A, 48.
Anderson, R. J. 1912 D, 251.
Anthony, R. 1913 A, 243 ("anoures").
Anthony and Vallois 1914 A, 220 ("anoures").

Arldt, T. 1907 D, 638.
1912 A, 678.
1916 A, 114 ("anuren").
Baraldi, G. 1877 A, 8 ("anoures").
Bardeleben, K. 1889 A, 107 ("anuren").
1901 A ("anuren").
1904 A, 109 ("anuren").
Baur, G. 1885 L ("batrachians").
1897 D, 52 (Ecaudata).
Beer, G. R. 1926 A, 310.
Bender, O. 1907 A, 40 ("anuren").
1910 A, 125 ("anuren").
Beyer, H. 1907 A, 269 ("batrachier").
Blainville, H. M. D. 1835 A, 274 (Batrachia).
Boas, J. E. V. 1914 B, 554 ("anuren").
Bonaparte, C. L. 1832 A, 318 (Anoura).
1833 B, 1186 (Caducibranchia).
Boulenger, G. A. 1901 B, 402.
1902 F, 383 (Ecaudata).
Braus, H. 1906 A ("anuren").
1909 A.
Bridge, T. W. 1878 A, 725.
Broom, R. 1899 A, 766.
1909 B, 165.
Carter, J. T. 1905 A, 129, 140.
Carus, V. 1875 A, 473.
Cligny, A. 1899 A, 133 ("batraciens").
Cope, E. D. 1865 B, 97-120.
1865 C, 97.
1885 BB, 65.
1885 DD, 317.
Coyle, R. F. 1909 A, 582.
Cunningham, J. T. 1897 A, 487 (Batrachia).
Cunningham and Boulenger 1912 A, 165, 169, 211.
Dana, J. D. 1863 A, 1 ("tailless batrachians").
Delsman, H. C. 1924 A, 155.
Dollo, L. 1884 D, 86 (Anura).
1885 C, 303 ("anoures").
Dombrowsky, B. A. 1918 A, 197, 204.
1925 A, 71, fig. 2.
Duméril, A. M. C. 1906 A, 92 (Ecaudati).
Dunn, E. R. 1923 A, 130.
Ebner, V. 1896 A, 146 ("batrachier").
Edgeworth, F. H. 1920 A, 127.
1925 A, 225.
Eimer, G. H. T. 1901 A, 62, 242 ("anuren").
Elliot, A. I. M. 1907 A, 648.
Emery, C. 1890 A, 283 ("anuren").
1895 A, 218 ("anoures").
Fejérváry, G. J. 1917 A, 1-38 ("anoures").
1921 C, 1-30.
Frassetto, F. 1915 A ("anuri").
Fuchs, H. 1908 A, 354 ("anuren").
1909 B, 122, 148 ("anuren").
1909 D, 8, 76 ("anuren").
1911 A, 34 ("anuren").
1912 D, 153 ("anuren").
1922 A, 283.
1926 A, 119.
1926 B, 1-34.
Fürbringer, M. 1904 A, 594 ("anuren").
Gadow, H. 1901 A, 398.
1901 B, 18, 138 (Salientia).
1902 B, 346.
1905 A, 205.
Gaupp, E. 1895 A, 58, seq. ("anuren").
1898 B ("anuren").
Gaupp, E. 1899 A, 1004, 1047 ("anuren").
1900 A, 574 ("anuren").
1901 B, 950 ("anuren").
1902 A, 217 ("anuren").
1905 A, 286.
1905 D, 931, 969 ("anuren").
1906 A, 24 ("anuren").
1906 B, 718 ("anuren").
1910 C, 406.
1911 A, 418, 422 ("anuren").
1911 B, 116 ("anuren").
1911 C, 441 ("anuren").
1913 A, 23 ("anuren").
Gegenbaur, C. 1867 B, 404.
1888 A, 394 ("anuren").
Gelderen, C. 1922 A, 234.
1923 A, 15.
1925 A, 502.
Gervais, P. 1853 B, 54 ("anoures").
Gill, T. 1897 A, 447 (Salientia).
Goeppert, E. 1896 B, 20 ("anuren").
1897 A, 248 ("anuren").
Gray, J. E. 1825 A, 213 (Anoura).
Gregory, W. K. 1917 B, 317.
1920 A, 224.
Gregory and Adams 1915 A, 763.
Gregory, Miner and Noble 1923 A, 285.
Günther, A. 1858 A, 339, 342.
Haeckel, E. 1868 A, 450.
Hase, A. 1913 A, figs. 39, 45.
Hasse, C. 1873 B, 614 ("batrachier").
1892 A, 253 ("anuren").
Hasse and Schwarck 1870 A, 48, 51 ("batrachier").
Heilprin, A. 1887 A, 307.
Henshaw, H. W. 1912 A, 318 ("frogs and toads").
Hertwig, O. 1874 B, 21 ("anuren").
Higgins, G. M. 1920 A, 293.
Hilzheimer, M. 1913 A, 475 ("anuren").
Hoernes, R. 1886 A, 577.
Hoeven, J. v. d. 1866 A, 364 (Anoura).
1891 A, 158, pl. xiv, fig. 3.
Hoffmann, C. K. 1878 B, 612.
Hommes, J. H. 1924 A, 37 ("anures").
Howes, G. B. 1893 B, 270.
1902 A, 525.
Howes and Swinnerton 1901 A, 17.
Huene, F. 1922 G, 454 ("anuren").
1926 A, 265 ("anuren").
Huxley, T. H. 1859 D, 412, 445.
Ihering, H. 1880 A, 299 ("anuren").
Iwanzoff, N. 1894 A, 579 ("anuren").
Jacobshagen, E. 1920 A, 91 ("anwien").
Jaekel, O. 1909 A, 194 ("anuren").
Kapelkin, W. 1900 A ("anuren").
Kehrer, F. A. 1896 A, 353.
Kingsley, J. S. 1900 A, 212.
1901 B, 337.
1925 A, 40, 130, 280.
Klaauw, C. J. 1924 B, 579.
Klein, E. F. 1868 A (Ecaudata).
Köstlin, O. 1844 A ("ungeschwänzte").
Koken, E. 1896 B, 143.
Kothe, K. 1910 A, 29 ("anuren").
Kravetz, L. P. 1906 A, 6.
Laaser, P. 1903 A, 573 ("frösche").

Lakjer, T. 1927 A, 202 ("anuren").
Lataste, F. 1888 A, 236 ("anoures").
Lavocat, A. 1885 A, 33 ("anoures").
1889 A, 43 ("batraciens").
Lebedinsky, N. G. 1917 A, 316 ("anuren").
LeDamany, P. 1902 A, 334 ("anoures").
1906 A, 58 ("anoures").
1906 B, 158 ("anoures").
Leunis and Ludwig 1883 A, 607.
Malbranc, M. 1875 A (Batrachia).
Meckel, J. F. 1825 A ("ungeschwänzte").
Metcalf, M. M. 1923 A, 388.
Moodie, R. L. 1909 D, 243 (Salienta).
1909 F, 220 (Salienta).
1911 H, 243 (Salienta).
1912 B, 286 (Salienta).
1914 B, 531 (Salienta).
1915 F, 190 (Salienta).
1915 H, 638 (Salienta).
1916 A, 4, 72 (Salienta).
Nicholls, G. E. 1915 A, 239.
1916 E, 80.
Noble, G. K. 1922 A, 1-78, pls. i-xxiii.
1925 A, 265.
1925 B, 1.
1925 C, 1, 7.
1926 B, 1 ("frogs").
1926 C, 1.
Osborn, H. F. 1917 B, 178.
Owen, R. 1848 B, 88 ("anourans").
1866 A, 15 (Theriomorpha, Anura).
1868 A, 911.
Palacký, J. 1898 B, 374 ("batrachier").
Parker, W. K. 1879 C, 332 (Batrachia).
1880 B, 161 (Batrachia).
1887 B, 53 ("anurans").
Parker and Haswell 1897 A, 273.
Pehrson, T. 1922 A.
Perrin, A. 1896 A, 90 ("anoures").
Petersen, H. 1922 A, 22, figs. 1-6 ("anuren").
Petronievics, B. 1921 A, 107 ("anoures").
Pfeiffer, H. 1854 A, 46 ("ungeschwänzte").
Pompeckj, J. F. 1912 A, 338, 343.
Proctor, J. B. 1921 A, 197 (Ecaudata).
Puccioni, N. 1908 A, 56 (Batraci).
Rabl, C. 1903 A, 184 ("anuren").
Reynolds, S. H. 1897 A, 532.
Ridewood, W. G. 1897 A, 359.
1897 C.
1898 A, 474.
Röse, C. 1892 G, 141 ("batrachier").
Sabatier, A. 1902 A, 99 ("anoures").
Sagemehl, M. 1883 A ("anuren").
Schauinsland, H. 1906 A, 490 ("anuren").
Schmalhausen, J. J. 1907 A, 178 ("anuren").
1908 A, 337 ("anuren").
1916 B, 138.
1917 A, 103.
Schöne, G. 1902 A, 9 ("anuren").
Schuchert, C. 1915 A, 800.
Schwarz, H. 1908 B, 101 ("anuren").
Seeley, H. G. 1872 B, 27 ("anurous amphibia").
1888 I, 235.
Sewertzoff, A. 1896 A, 207.
1904 A, 484.
1908 A, 359 ("anuren").
1926 D, 75, fig. 4 ("anuren").
Sollas, W. J. 1920 A, 525.
Sonies, F. 1907 A, 405 ("anuren").
Spencer, W. B. 1886 A, 173.
Steiner, H. 1921 A, 519 ("anuren").
Stejneger, L. 1907 A, 47.
Stejneger and Barbour 1917 A, 25 (Salientia).
Sterling, S. 1908 A, 334.
Stöhr, P. 1881 A, 68 ("anuren").
Strecker, C. 1887 A, 307 ("batrachier").
Stromer, E. 1912 A, 57.
Suschkin, P. P. 1910 A, 244.
Taschenberg, O. 1894 A, 3547 (Ecaudati).
Terra, P. 1911 A, 224.
Tschudi, J. J. 1839 A, 25 (Batrachia).
Van Gelderen, C. 1925 A, 505 ("anuren").
Versluys, J. 1912 B, 566 ("anuren").
1912 C, 314 ("anuren").
Vialleton, L. 1917 A, 191 ("anoures").
Villiers, C. G. S. 1922 A, 153-225 ("anuren").
Virchow, H. 1914 C, 132 ("anuren").
Wagner, R. 1843 A.
Watson, D. M. S. 1914 D, 168 (Batrachia).
1916 C, 632.
1917 A, 979 ("frogs and toads").
1917 B, 56.
1919 B, 58 (Ecaudati).
1919 C, 239.
Wegner, R. N. 1922 A, 418 ("anuren").
Wiedersheim, R. 1892 A, 50 ("anuren").
Williston, S. W. 1914 A, 3 ("frogs").
1916 B, 211 (Batrachia).
Winslow, G. M. 1898 A, 172.
Wintrebert, P. 1910 B, 172 ("anoures").
Wortman, J. L. 1920 A, 42 ("anourous batrachia").
Zittel and Broili 1911 A, 177.
1923 A, 206.
Zittel, Eastman, etc. 1902 A, 137.

Suborder Bufoniformes Cope.

Cope, E. D. 1865 B, 97, 100, 104 (Bufoniformia).
Abel, O. 1919 A, 322 (Arcifera).
Arldt, T. 1916 A, 116, 143 ("arciferen").
Braus, H. 1919 A, 7, 16, 44 (Arcifera).
Cope, E. D. 1866 F, 67.
1867 G, 189, 199.
1875 X, 30 (Bufoniformia, Arcifera).
1885 DD, 326 (Arcifera).
1889 D, 246, 248, 253 (Arcifera).
1891 N, 33 (Arcifera).
Cunningham and Boulenger 1912 A, 166 (Arcifera).
Duméril and Bibron 1841, Erpet. Gen., viii, 50, 303 ("bufoniformes").
Fejérváry, G. J. 1921 C, 23 ("Arcifera"); 127 (Bufonimorpha).
Gelderen, C. 1925 A, 501 (Arcifera).
Lydekker, R. 1890 A, 124 (Arcifera).
Noble, G. K. 1922 A, 12, 22, 41, table 2 (Procœla); 17 (Arcifera).
Pompeckj, J. F. 1912 A, 338, 344 (Arcifera).
Proctor, J. B. 1921 A, 197 (Arcifera).
Villiers, C. G. S. 1922 A, 155, 163 (Arcifera).

PELIONTIDÆ Cope.

Cope, E. D. 1875 X, 11.
Hay, O. P. 1902 A, 410 (Protritonidæ).
Gregory, W. K. 1917 B, 313 (Peleontidæ).
Moodie, R. 1916 A, 72.

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Hay, O. P. 1902 A, 411.
Abel, O. 1919 A, 296.
Case, E. C. 1917 A, 135.
1919 B, 200.
Gaudry, A. 1875 A, 304 (Raniceps).
Gregory, W. K. 1917 B, 316.
Heilprin, A. 1887 A, 310.
Huxley, T. H. 1863 C, 571 (Raniceps).
Moodie, R. L. 1909 E, 40.
1916 A, 72.
Owen, R. 1860 E, 183 (Raniceps).
Pompeckj, J. F. 1912 A, 346.

Pelion lyellii Wyman.

Hay, O. P. 1902 A, 411.
Gaudry, A. 1875 A, 304 (Raniceps).
Gaudry, A. 1875 E, 443 (Raniceps).
Gregory, W. K. 1917 B, 316 (P. lyelli).
Metcalf, M. M. 1923 A, 405.
Moodie, R. L. 1908 E, 561, fig. 1.
1908 F, 254 (P. lyelli).
1909 B, 25.
1909 D, 240, pl. i (P. lyelli).
1909 E, 40 (P. lyelli).
1912 B, 286.
1914 A, 24 (P. lyelli).
1914 B, 531 (P. lyelli).
1916 A, 73, pl. xxiv, figs. 1, 17 (P. lyelli).
Pompeckj, J. F. 1912 A, 346 (P. lyelli).
Wyman, J. 1857 B, 172 ("batrachian reptile").
1857 C, 360 ("reptile").
Pennsylvanian (Linton); Ohio.

BUFONIDÆ Günther.

Günther, A. 1858, Cat. Batr. Sal. Brit. Mus., 54.
Arldt, T. 1907 D, 642.
1912 A, 689.
1916 A, 129, 143 ("bufoniden").
Carus, V. 1875 A, 478.
Cope, E. D. 1865 B, 102, 114.
1885 DD, 327.
Cunningham and Boulenger 1912 A, 166, 169.
Cuvier, G. 1805 A ("crapauds").
Dunn, E. R. 1923 A, 130.
Fejérváry, G. J. 1917 A, 11, 18 (Bufonidæ, Bufoninæ).
1921 A, 28 ("bufonides").
1921 C, 19, 22.
Gadow, H. 1901 B, 166.
1905 A, 205.
Gaupp, E. 1905 D, 991.
Hasse, C. 1892 A, 254 ("kröten").
Hoffmann, C. K. 1878 B, 607.
Köstlin, O. 1844 A ("kröten").
Leunis and Ludwig 1883 A, 616.
Lobley, J. L. 1908 A, 203.
Meckel, J. F. 1825 A ("kröten").
Metcalf, M. M. 1923 A, 401, fig. 12.
Moodie, R. L. 1912 B, 287.
Nicholls, G. E. 1916 A, 81.
Noble, G. K. 1922 A, 20, 22, 67.
1926 A, 12.
Owen, R. 1845 B, 194.
1866 A, 15.
Palacký, J. 1898 B, 376.
Proctor, J. B. 1921 A, 208, 214.
Ridewood, W. G. 1898 A, 475, 482.
Stannius, H. 1856 A (Bufonion).
Steiner, H. 1921 A, 528.
Stejneger, L. 1907 C, 55.
Wallace, A. R. 1876 A, ii, 415.
Zwick, W. 1897 A, 100.

BUFO laurenti. Type *Bufo vulgaris* Laurenti.

Laurenti, J. N. 1768, Syn. Rept., 25.
Abel, O. 1919 A, 315, fig. 238.
Adolphi, H. 1896 A, 115, pl. viii.
Anthony and Vallois 1914 A, 259.
Arldt, T. 1907 D, 642.
1916 A, 121.
Bardeleben, K. 1901 A, 51.
Blainville, H. M. D. 1835 A, 277.
Boas, J. E. V. 1914 C, 253, figs. 30, 31.
Braus, H. 1909 A.
1919 A, 10, 25, fig. 1.
Bronn, H. G. 1849 A, 684.
Camp, C. L. 1917 A, 289.
Cope, E. D. 1885 DD, 321.
Cunningham and Boulenger 1912 A, 166.
Dunn, E. R. 1923 A, 131.
Eggert, B. 1927 A, 566.
Eimer, G. H. T. 1901 A, 256.
Field, H. H. 1895 A, 341.
Foote, J. S. 1916 A, 46, pl. iii.
Frassetto, F. 1915 A.
Gadow, H. 1896 A, 15.
Gadow, H. 1901 B, 169.
Gaupp, E. 1899 A, 1052.
Giebel, C. G. 1855 A, 98.
Goeppert, E. 1896 B, 25, fig. 19.
Gregory, W. K. 1920 A, 118, fig. 25.
Hanson, F. B. 1919 B, 68, fig. 21.
Hasse, C. 1892 A, 254.
Heilprin, A. 1887 A, 307, 312.
Hoffmann, C. K. 1874 A, 18, 28.
1878 B, 608, 643, pls. x-xii, xiv, xv.
Iwanzoff, N. 1894 A, 580.
Kingsley, J. S. 1925 A, 247, fig. 261.
Metcalf, M. M. 1923 A, 401, fig. 11.
Miller, N. 1909 A, 641.
Moodie, R. L. 1912 B, 287.
Nehring, A. 1880 A.
Nicholls, G. E. 1914 A, 420.
1916 A, 80.
Noble, G. K. 1922 A, 20, 25.
1925 A, 271.
Owen, R. 1848 B, 88.
1866 A, 177, 183.

Owen, R. 1868 A, 868.
Palacký, J. 1898 B, 374.
Parker, W. K. 1877 B, 582.
1880 B, 161.
Parker and Bettany 1877 A, 177.
Proctor, J. B. 1921 A, 208.
Reynolds, S. H. 1897 A, 169, 182, 186.
Ridewood, W. G. 1897 A.
1897 C.
Schmalhausen, J. J. 1908 A, 341, fig. 4.
1917 A, 102.
Stannius, H. 1856 A, 41, 42.
Stejneger, L. 1907 C, 55.
Stephan, P. 1900 A, 332.
Strecker, C. 1887 A, 307.
Taschenberg, O. 1894 A, 3548.
Versluys, J. 1912 C, 315, fig. 19.
Zwick, W. 1897 A, 100, fig. 19.

Bufo boreas halophilus Baird and Girard.

Baird and Girard 1853, Proc. Acad. Nat. Sci. Phila., 101 (B. halophila); 378 (B. boreas).
Boulenger, G. A. 1882 B, 295 (B. halophilus); 296 (B. boreas).
Camp, C. L. 1917 A, 287.
Cope, E. D. 1889 D, 267, 269, figs. (B. columbiensis halophilus).
Girard, C. 1854, in Baird, U. S. Mex. Bound. Surv., 26, pl. xli (B. halophila).
1858, U. S. Explor. Exped., Herp., 74, pl. vi (B. boreas).
Recent; California, Nevada, Lower California: Pleistocene; California.

Bufo nestor Camp.

Camp, C. L. 1917 A, 287, figs. 1-3.
Hay, O. P. 1927 D, 187.
Merriam, J. C. 1915 G, 96 ("toad").
Pleistocene (La Brea); California.

Bufo sp. indet.

Brown, B. 1908 A, 206, pl. xxii. Pleistocene; Arkansas.
Hay, O. P. 1924 D, 252. Pleistocene; Arkansas.
1927 D, 136. Pleistocene? Arizona (This genus?).
Moodie, R. L. 1914 B, 536. Miocene; Kansas.

EOBATRACHUS Marsh. Type *E. agilis* Marsh.

Hay, O. P. 1902 A, 425.
Arldt, T. 1912 A, 668.
1916 A, 114, 118, 120.
Fejérváry, G. J. 1921 C, 29.
Simpson, G. G. 1926 H, 204.

Eobatrachus agilis Marsh.

Hay, O. P. 1902 A, 425.
Arldt, T. 1916 A, 114.
Fejérváry, G. J. 1917 A, 6.
Lydekker, R. 1913 A, 19.
Metcalf, M. M. 1923 A, 399, 403.
Moodie, R. L. 1908 F, 258.
1909 D, 240.
1912 B, 286.
1914 A, 18.
1914 B, 532, figs. 1, 2.
Noble, G. K. 1922 A, 64.
Pompeckj, J. F. 1912 A, 344.
Simpson, G. G. 1926 E, 2, 4.
Jurassic (Como beds); Wyoming.

Suborder RANIFORMES Cope.

Cope, E. D. 1865 B, 97, 104, 114 (Raniformia).
Abel, O. 1919 A, 324 (Firmisternia).
Arldt, T. 1916 A, 131, 143 ("firmisternier").
Boulenger, G. A. 1882 B, 2 (Firmisternia).
Braus, H. 1919 A, 7, 9, 44 (Firmisternia).
Carus, V. 1875 A, 474 (Raniformia).
Cope, E. D. 1866 F, 190.
1867 G, 189, 190 (Raniformia).
1875 X, 8, 32 (Raniformia).
1885 DD, 339 (Firmisternia).
1885 GG, 318, 341 (Firmisternia).
1889 D, 246, 248, 383 (Firmisternia).
1891 N, 33 (Firmisternia).
Cunningham and Boulenger 1912 A, 165 (Firmisternia).
Duméril and Bibron 1841, Erpet. Gen., viii, 50, 303, 304 ("raniformes").
Fejérváry, G. J. 1921 C, 23 ("Firmisternia"); 27 (Ranomorpha).
Hoffmann, C. K. 1878 B, 608 (Raniformia).
Lataste, F. 1888 A, 237.
Lydekker, R. 1890 A, 121 (Firmisternia).
Nicholls, G. E. 1916 A, 87 (Diplasiocœla).
Noble, G. K. 1922 A, 12, 22, 41, table 2 (Diplasiocœla); 17 (Firmisternia).
1925 A, 265 ("frogs").
Pompeckj, J. F. 1912 A, 338, 344 (Firmisternia).
Villiers, C. G. S. 1922 A, 163 (Firmisternia).

RANIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 68.
Hay, O. P. 1902 A, 425.
Abel, O. 1912 F, 255 ("frösche").
Ahlborn, F. 1896 B, 7 ("frösche").
Anthony, R. 1913 A, 260.
Arldt, T. 1907 D, 678.
1916 A, 134 ("raninen").
Bonaparte, C. L. 1833 B, 1186.
Braus, H. 1919 A, 7, 9, 17.
Carus, V. 1875 A, 474.
Cope, E. D. 1865 B, 114.
1867 G, 191.
1885 DD, 340.
Cunningham and Boulenger 1912 A, 165, 169.
Cuvier, G. 1815 A, 106 ("grenouilles").
Eimer, G. H. T. 1901 A, 258 ("frösche").
Fejérváry, G. J. 1917 A, 21.
1921 A, 29.

Fejérváry, G. J. 1921 C, 19.
Gadow, H. 1901 B, 237.
1905 A, 208.
Gaupp, E. 1905 D, 979.
1910 C, 406 ("frösche").
Gelderen, C. 1922 A, 235.
Geoffroy-St. Hilaire, E. F. 1817 B, 186 ("grenouilles").
1832 A, 350 ("grenouilles").
Hasse, C. 1871 B, 377-416.
1873 B, 615 ("frösche").
1892 A, 254 ("frösche").
Hay, O. P. 1923 A, 312.
Hoffmann, C. K. 1878 B, 610, 613, 617.
Hogg, J. 1839 A, 273.
Kehrer, F. A. 1896 A, 353 ("frösche").
Köstlin, O. 1844 A ("frösche").
Leunis and Ludwig 1883 A, 610.
Lobley, J. L. 1908 A, 203.
Matthew, W. D. 1915 A, 296.
Meckel, J. F. 1825 A ("frösche").
Metcalf, M. M. 1923 A, 389.
Meyer, H. 1860 F, 123 ("frösche").
Nicholls, G. E. 1916 A, 82.
Noble, G. K. 1922 A, 22, 66.
Palacký, J. 1898 B, 375 ("raniden").
Ridewood, W. G. 1898 A, 475, 478.
Roux, J. 1905 A, 777.
Stannius, H. 1856 A (Ranina).
Steiner, H. 1921 A, 524, 528.
Stejneger, L. 1907 C, 92.
Wagner, R. 1843 A ("frösche").
Wallace, A. R. 1876 A, ii, 420.

Rana Linn. Type *R. temporaria* Linn.

Linnæus, C. 1758 A, i, 210.
Hay, O. P. 1902 A, 425.
Abel, O. 1912 F, 256, fig. 187.
1919 A, 312, figs. 232, 239, 242, 243, 246, 247.
Adams, L. A. 1919 A, 83, pl. v.
Allis, E. P. 1909 A, 192 ("frog").
1919 C, 259.
1923 A, 48.
Altmann, F. 1925 A, 92, figs. 6-8.
Anthony and Vallois 1914 A, 235, figs. 13, 31-33.
Arldt, T. 1907 D, 678.
1916 A, 134.
Baker, F. C. 1920 A, 213, 394.
Beer, G. R. 1926 A, 311, figs. 76-80.
Beyer, H. 1907 A, 270, figs. 2-5.
Boas, J. E. V. 1914 C, 250, figs. 23-25.
Bojanus, L. H. 1821 A, 1163.
Boulenger, G. A. 1920 A, 412.
Braus, H. 1909 A.
1919 A, 13, 21, 41, figs. 6, 7, 8.
Bronn, H. G. 1848 B, 1077.
1849 A, 684.
Broom, R. 1909 B, 162 ("frog").
Carus and Engelmann 1861 A, 1794.
Cleland, J. 1863 B, 312 ("frog").
Cockerell, T. D. A. 1916 B, 183, 186 ("frog").
Cope, E. D. 1865 B, 117.
1885 DD, 319, 327, 341, figs. 189, 190.
Cuvier, G. 1805 A.
1825 A, v, 2, 386, pl. xxiv.
Delsman, H. C. 1913 A, 677.
Dombrowsky, B. A. 1918 A, 197, fig. 1.
Ebner, V. 1896 A, 149.
Edgeworth, F. H. 1920 A, 127, figs. 1-22.
1925 A, 231.
Eggert, B. 1927 A, 566.
Eisler, P. 1895 A, 54.
Elliot, A. I. M. 1907 A, 647.
Emery, C. 1890 A, 285, fig. 1.
Fejérváry, G. J. 1916 A, 131, pls. xi-xii; text-figs. 1-22.
Field, H. H. 1895 A, 341, pls. xii, xiii.
Foote, J. S. 1916 A, 35, pl. i.
1921 A, 4, pl. i, figs. 4, 5.
Fuchs, H. 1909 C, 100, fig. 12.
1922 A, 283, figs. 1-3.
1926 A, 120, figs. 1-6.
1926 B, 1-34, figs. 1-4.
Gadow, H. 1901 B, 249.
Gaupp, E. 1899 A, 1014, 1050 ("frosch").
1900 A, 567.
1901 B, 953, figs. 2, 3.
1902 A, 167, fig. 2.
1905 D, 971, fig. 22.
1906 B.
1908 B, 524.
1908 C, 668.
1910 C.
1911 C, 442.
1913 A, 10, fig. 3.
Gebhardt, F. A. M. W. 1907 A, 77.
Gegenbaur, C. 1862 A, 179, pl. ("frosch").
Gelderen, C. 1923 A, 30.
Gervais, P. 1859 A, 494, pl. lxiv.
Giebel, C. G. 1855 A, 98, pl. xlii, figs. 2, 5.
Goodsir, J. 1857 A.
Gregory, W. K. 1920 A, 118, fig. 24.
Hasse, C. 1871 B, 377-416, pl. xviii.
1873 B, 618.
1892 A, 254.
Heilprin, A. 1887 A, 307, 308, 312.
Hertwig, O. 1874 B, pls. i-v.
Hoffmann, C. K. 1878 B, 612, 618, pls. ii-iv, x, xi, xiii, xv.
Hommes, J. H. 1924 A, 37.
Howes, G. B. 1893 B, 268, figs. 1-3.
Huxley, T. H. 1853 A, 150 ("frog").
1859 D, 403, fig. 9.
1863 F, 428, figs. 39, 40 ("frog").
Ihering, H. 1880 A, 300, fig. 2.
Iwanzoff, N. 1894 A, 580.
Kesteven, H. 1916 A, 304.
1919 A, 223.
Kingsbury, B. F. 1895 A, 132, pl. v, figs. 37, 38.
1926 A, 98 ("frog").
Kingsbury and Reed 1909 A, 609 ("frog").
Kingsley, J. S. 1900 A, 212 ("frog").
1925 A, 131, 133, 247, 248, 263, figs. 140-143, 261-263, 303.
Klaauw, C. J. 1924 B, 579.
Köstlin, O. 1844 A.
Kothe, K. 1910 A, 44, figs. 20, 22-25, 27.
Lakjer, T. 1927 A, 202, figs. 108, 133.
LeDamany, P. 1902 A, 337 ("grenouille").
Leunis and Ludwig 1883 A, 611.
Leydig, F. 1890 A, 442.

Lobley, J. L. 1908 A, 199.
Malbranc, M. 1875 A.
Matthes, E. 1921 A, 217.
Metcalf, M. M. 1923 A, 398, fig. 8.
Meyer, H. 1860 F, 126, pls. xvi, xviii-xxii.
Mivart, St. G. 1879 B, 539, figs. 7-9 ("frog").
Nehring, A. 1880 A.
Nicholls, G. E. 1915 A, 239, figs.
Noble, G. K. 1922 A, 3, 25, 37.
1925 A, 269, 271.
1926 B, 10, 12, fig. 6.
Osborn, H. F. 1926 C, 340.
Owen, R. 1845 B, 193, pl. lxii, fig. 10.
1848 B, 37, fig. 13.
1868 A, 905.
Palacký, J. 1898 B, 374.
Parker, W. K. 1880 B, 161.
Parker and Bettany 1877 A, 176.
Parker and Haswell 1897 A, 245, figs. 869-886.
Petersen, H. 1922 A, 23, figs. 1-3, 5.
Pfeiffer, H. 1854 A, 46, pl. i, fig. 12.
Prashad, B. 1918 A, 1, figs. 1-8.
Proctor, J. B. 1919 A, 21.
Retterer, E. 1908 A, 487.
Reynolds, S. H. 1897 A, 541, figs. 24-26, 29, 30 (Rana, "frog").
Ridewood, W. G. 1897 A.
1897 C.
Roux, J. 1905 A, 783.
Schauinsland, H. 1906 A.
Schmalhausen, J. J. 1907 A, 183.
Schumann, A. 1904 A, 283.
Sewertzoff, A. N. 1908 A, 370, fig. 33.
Sirena, S. 1872 A, 128.
Sonies, F. 1907 A, 442.
Stannius, H. 1856 A.
Stejneger and Barbour 1917 A, 35.
Stöhr, P. 1881 A, 69, pls. ii, iii.
Struck, W. 1915 A, 139, fig. 8.
Sutton, J. B. 1884 A, 567.
Taschenberg, O. 1894 A, 3556.
Tomes, C. S. 1875 A, 94 ("frog").
Van Gelderen, C. 1925 A, 501.
Versluys, J. 1912 C, 315, figs. 1, 2, 4.
Villiers, C. G. S. 1922 A, 154, fig. 1.
Virchow, H. 1914 D, 320, fig. 1.
Wilder, B. G. 1865 A, 56.
Wyman, J. 1867 B, 261, fig. 7.
Zittel and Broili 1911 A, 178.
1923 A, 165, 207, figs. 260, 313, 314.

Rana sp. indet.

Hay, O. P. 1902 A, 425.
Brown, B. 1908 A, 206, pl. xxii. Pleistocene; Arkansas.
Hay, O. P. 1927 D, 138. Pleistocene; Arizona.
Peterson, O. A. 1926 A, 252. Pleistocene; Pennsylvania.

SUPPLEMENT

Abel, O. 1926 F

Über die Funde von Dinosauriereiern in China.

Verh. zool.-bot. Ges. Wien, LXXIV, (37), (39).

—— 1926 G

Lebensspuren in der oberen Trias des Connecticuttales in Connecticut und Massachusetts.

Verh. zool.-bot. Ges. Wien, LXXIV, (145)-(150).

—— 1926 H

Geschichte der Equiden auf dem Boden Nordamerikas.

Verh. zool.-bot. Ges. Wien, LXXIV, (159)-(164).

—— 1927 A

Neuere Studien über Panzerfische.

Verh. zool.-bot. Ges. Wien, LXXVII, (30)-(31).

—— 1927 B

Ein Beitrag zur Kenntnis von *Heterostius convexus* Asmuss aus den Alten Roten Sandstein von Arokülla bei Dorpat; die Gelenkverbindung zwischen den Schädeldach und dem Rumpfpanzer.

Palaeont. Zeitschr., IX, 314-319, figs. 1-3.

—— 1927 C

Remarks on *Batrachoides.*

Palæont. Zeitschr., IX, 329.

—— 1928 B

Das biologische Trägheitsgesetz.

Biol. Gen., IV, 1-102, pl. i, a table and 50 text-figs.

References to the literature occur in foot-notes.

—— 1928 A

Allognathosuchus, ein an die cheloniphage Nahrungsweise angepasster Krokodiltypus des nordamerikanischen Eozäns.

Palaeont. Zeitsch., IX, 367-374, 1 text-fig.

Bignon, Fanny 1899 A

Contribution a l'étude de la pneumaticité chez les oiseaux. Les cellules aériennes cervico-céphaliques des oiseaux et leurs rapports avec les os de la tête.

Mém. Soc. Zool. France, II, 260-320, pls. X-XIII.

References to the literature in foot-notes.

Bohlin, Birger 1927 A

Die Familie Giraffidæ, mit besonderer Berücksichtigung der fossilen Formen aus China.

Palaeont. Sinica (C), IV, fasc. 1, 1-179, pls. i-xii, 254 text-figs.

Pages 175 to 178 are occupied by the bibliography.

Branson, E. B., and M. G. **Mehl** 1928 B

Auditory organ of the labyrinthodonts (Abstract).

Bull. Geol. Soc. Amer., XXXIX, 301.

—— —— 1928 C

Auditory organs of some labyrinthodonts.

Bull. Geol. Soc. Amer., XXXIX, 485-489, 2 figs.

Bretz, J. H. 1928 A

Alternate hypotheses for channeled scabland.

Jour. Geol., XXXVI, 193-341, figs. 1-10.

Broili, F. 1927 D

Über die Hautbedeckung der Archegosauridæ und Actionodontidæ.

Zeitschr. deutsch. Geol. Ges., LXXIX, 375-384, pl. vii, 4 text-figs.

Citations of the literature in foot-notes.

—— 1927 E

Ein Stegocephalenrest aus dem Hauptmuschelkalk von Poppenlauer (Unterfranken).

Centralbl. Min. Geol. Pal., 1927, Abt. B, 18-21, 1 fig.

References to the literature in foot-notes.

Brown, B. 1926 A

A new deer from the Siwaliks.

Amer. Mus. Novit., No. CCXLII, 1-6, 5 figs.

Bullman, O. M. B. 1928 A

Additional notes on some branchiosaurs from Odernheim.

Ann. Mag. Nat. Hist. (10), I, 250-255, figs. 1-4.

Cabrera, Angel 1927 A

Sobre el origen y significación del entrecruzamiento de las defensas en algunos elefantes.

Bol. Soc. españ. hist. nat., XXVII, 441-449, 2 figs.

—— 1928 A

Sobre algunos megaterios pliocenos.

Rev. Mus. La Plata, XXXI, 339-352, pls. i, ii and 6 text-figs.

Case, E. C. 1928 A

An endocranial cast of a phytosaur from the Upper Triassic beds of western Texas.

Jour. Comp. Neur., XLV, 161-168, 8 figs.

—— 1928 B

A cotylosaur from the Upper Triassic of western Texas.

Jour. Wash. Acad. Sci., XVIII, 177-178, 1 fig.

Castellanos, Alfredo 1927 B

Breves notas sobre Clamidoterios.

Publ. "Centro Estudiantes de Ingenieria de Rosario." Rosario, Argentina, 1-5, figs. 1-5.

Chardin, P. T. 1927 A

Les mammifères de l'Eocène inférieur de las Belgique.

Mém. Mus. hist. nat. Belgique, No. 36, 1-33, pls. i-vi, 29 text-figs.

There are 17 titles in the bibliography.

—— 1928 A

Observations sur la lenteur d'évolution des faunes de mammifères continentales.

Palæobiol., I, 55-60.

Cook, H. J. 1927 C

New geological and palæontological evidence bearing on the antiquity of mankind in America.

Nat. Hist., XXVII, 240-247, 9 figs.

—— 1928 A

Further evidence concerning man's antiquity at Frederick, Oklahoma.

Science (n.s.), LXVII, 371-373.

—— 1928 B

A new longirostrine elephant from Nebraska, *Trilophodon phippsi* sp. nov.

Proc. Colorado Mus. Nat. Hist., VIII, 37-43, pls. i-iii.

—— 1928 C

Note on an interesting juvenile lower jaw of *Elephas cf. jeffersoni*.

Proc. Colorado Mus. Nat. Hist., VIII, 43-45, 2 figs.

Cooke, C. W. 1928 A

The stratigraphy and age of the Pleistocene deposits in Florida from which human bones have been reported.

Jour. Wash. Acad. Sci., XVIII, 414-421.

——, and L. W. **Stephenson** 1928 A

The Eocene age of the supposed late Upper Cretaceous Greensand marls of New Jersey.

Jour. Geol., XXXVI, 139-148.

Cuvier, F. 1808 A

Suite du mémoire intitulé: Essai sur de nouveaux caractères pour les genres des mammifères.

Ann. Mus. hist. nat. Paris, XII, 27-51, pl. iii.

In volume I, page 126, this paper is wrongly credited to George Cuvier, as Cuvier, G., 1808 D.

Dietrich, W. O. 1926 A

Über Fährten ornithopodider Saurier im Oberkirchener Sandstein.

Zeitschr. deutsch. Geol. Ges., LXXVIII, 614-621, 2 figs.

There is a bibliography of 11 titles.

Digby, Bassett 1926 A

The mammoth and mammoth hunting in northeast Siberia.

London, H. F. & G. Witherby, pp. 1-217, 12 pls., 4 text-figs. and 1 map.

Döderlein, L. 1923 A

Anurognathus ammoni, ein neuer Flugsaurier.

Sitz.-Ber. Akad. Wiss. München, 1923, 117-164, figs. 1-7.

Eaton, J. E. 1928 A

Divisions and duration of the Pleistocene in southern California.

Bull. Amer. Assoc. Petrol. Geol., XII, 111-141, 6 figs.

Edinger, Tilly 1928 A

Über einige fossile Gehirne.

Palaeont. Zeitschr., IX, 379-402, figs. 1-11.

Ehrenberg, K. 1927 A

Die Variabilität der Molaren des Höhlenbären.

Palaeont. Zeitschr., IX, 240-248.

Discussed by Jaekel, Sewertzoff, Abel and Ehrenberg.

Frost, G. A. 1927 A

A comparative study of the otoliths of the neopterygian fishes (continued).

Ann. Mag. Nat. Hist. (9), XX, 298-305, pl. v.

—— 1928 A

A comparative study of the otoliths of the neopterygian fishes (continued).

Ann. Mag. Nat. Hist. (10), I, 451-456, pl. xvii.

—— 1928 B

A comparative study of the otoliths of the neopterygian fishes (continued).

Ann. Mag. Nat. Hist. (10), II, 328-331, pl. xii.

Fuchs, H. 1927 A
Beiträge zur Entwickelungsgeschichte und vergleichenden Anatomie des Brustschultergürtels der Wirbeltiere. Siebente Mitteilung.
Anat. Anz., LXIV, 305-350, 14 figs.
The bibliography comprises 32 titles.

Gidley, J. W. 1926 G
Investigation of glacial deposits near Des Moines, Iowa.
Smithson. Misc. Coll., LXXVIII, No. 1, 23.
A supposed artifact was found.

—— 1926 H
Investigation of evidences of early man at Melbourne and Vero, Florida.
Smithson. Misc. Coll., LXXVIII, No. 1, 23-26, figs. 27-29.

—— 1926 I
Exploration of a Pleistocene spring-deposit in Oklahoma.
Smithson. Misc. Coll., LXXVIII, No. 1, 27-28, fig. 30.

—— 1928 A
A new species of bear from Florida.
Jour. Wash. Acad. Sci., XVIII, 430-433.

—— 1928 B
Continuing the elephant hunt.
Explor. and Field-work Smithson. Instn. in 1927, 11-16, figs. 11-17.

Gilmore, C. W. 1926 N
Collecting fossil footprints in Arizona.
Smithson. Misc. Coll., LXXVIII, No. 1, 20-23, figs. 25, 26.

—— 1927 I
Triceratops, a horned dinosaur.
Nat. Mag., IX, 393, fig.

—— 1928 B
A new pterosaurian reptile from the marine Cretaceous of Oregon.
Proc. U. S. Nat. Mus., LXXIII, art. 24, 1-5, 2 figs.

—— 1928 C
Fossil foot-prints in the Grand Canyon of the Colorado, Arizona.
Explor. and Field-work Smithson. Instn. in 1927, 7-10, figs. 8-10.

—— 1928 D
Fossil foot-prints from the Fort Union (Paleocene) of Montana.
Proc. U. S. Nat. Mus., LXXIV, art. 5, 1-4, pls. i-iii, 1 text-fig.

—— 1928 E
A new fossil reptile from the Triassic of New Jersey.
Proc. U. S. Nat. Mus., LXXIII, art. 7, 1-8, pls. i-iii.

Gilmore, C. W., and Glenn E. **Sturdevant** 1928 A
Discovery of fossil tracks on the north rim of the Grand Canyon.
Science (n.s.), LXVII, 216.

Granger, W., and G. G. **Simpson** 1928 A
Multituberculates in the Wasatch formation.
Amer. Mus. Novit., No. CCCXII, 1-4, 2 figs.

Gregory, W. K. 1927 J
The origin of man from the anthropoid stem—when and where?
Proc. Amer. Philos. Soc., LXVI, 439-463, pl. i; text-figs. 1-5.

Hay, O. P. 1926 G
A revision of the Pleistocene period in North America, based especially on glacial geology and vertebrate paleontology.
Jour. Wash. Acad. Sci., XV, 126-133.

—— 1928 B
Again on Pleistocene man at Vero, Florida.
Jour. Wash. Acad. Sci., XVIII, 233-241.

—— 1928 C
Characteristic mammals of the early Pleistocene.
Jour. Wash. Acad. Sci., XVIII, 421-430.

——, and H. J. **Cook** 1928 A
Preliminary descriptions of fossil mammals recently discovered in Oklahoma, Texas, and New Mexico.
Proc. Colorado Mus. Nat. Hist., VIII, 33.

Jaekel, O. 1927 A
Über die Atemorgane der Wirbeltiere.
Palaeont. Zeitschr., IX, 250-272, text-figs. 1-11.
Discussed by Fuchs, Voit, Versluys, Abel, Sewertzoff and Jaekel.

—— 1927 B
Untersuchungen über die Fischfauna von Wildungen.
Palaeont. Zeitschr., IX, 329-339; 341-342.
The bibliography includes 20 titles.

Kirchner, H. 1926 A
Zur Stratigraphie der sog. Chirotherienschichten in Franken.
Zeitschr. deutsch. Geol. Ges., LXXVIII, Monatsber., 184-192, 3 figs.

—— 1927 A
Über die Tierfährten im oberen Buntsandstein Frankens.
Palaeont. Zeitschr., IX, 112-121, figs. 1-10.

Korff, K. 1928 A
Über die Entwicklung der Elfenbeinzellen und ihre Beziehungen zur Dentigrundsubstanz.
Anat. Anz., LXIV, 383-395, 1 pl.

Kukuk, Paul 1926 A
Über Fährten von Landwirbeltieren im Karbon des Ruhrbezirks.
Zeitschr. deutsch. Geol. Ges., LXXVIII, 600-613, 4 figs.

Loomis, F. B. 1928 A
The genus *Poëbrotherium*.
Amer. Jour. Sci. (5), XVI, 137-142, figs. 1-3.

—— 1928 B
Phylogeny of the deer.
Amer. Jour. Sci. (5), XVI, 531-542, 10 figs.

Lull, R. S. 1928 A
A remarkable ground sloth.
Geol. Soc. Ameri. Prelim. lists, 41st meet., 23.

Marinelli, W. 1928 A
Über den Schädel der Schnepfe.
Palæobiol., I, 135-160, pl. xiv; text-figs. 1, 2.
In the bibliography are 18 titles.

Martin, Handel T. 1927 A
On the occurrence of *Bison latifrons* in Comanche County, Kansas.
Kansas Univ. Sci. Bull., XVII, 397-407, pls. xlii, xliii.

—— 1928 A
Two new carnivores from the Pliocene of Kansas.
Jour. Mamm., IX, 233-236, pls. xx, xxi.

Matthew, W. D. 1928 B
The evolution of the mammals in the Eocene.
Proc. Zool. Soc. Lond., 1927 (1928), 947-985, figs. 1-16.
This number of the Proceedings was not issued until January 1928.

——, and W. **Granger** 1926 A
Two new perissodactyls from the Arshanto Eocene of Mongolia.
Amer. Mus. Novit., No. CCVIII, 1-5, 4 figs.

——, and G. G. **Simpson** 1928 A
Paleocene multituberculates from Mongolia.
Amer. Mus. Novit., No. CCCXXXI, 1-4, 3 figs.

Maxson, John H. 1928 B
Mesohippus isonesus (Cope) from the later Tertiary of the Crooked River basin.
Publ. Carnegie Instn. Wash., No. 393, 57-58, fig. 1.

Mehl, M. G. 1919 A
The use of outline charts in teaching vertebrate paleontology.
Bull. Sci. Lab. Denison Univ., XIX, 47-53, pls. viii-xi.

—— 1928 A
Apatodonosaurus, a new genus of ichthyosaurs from the Jurassic of Wyoming.
Denison Univ. Bull. (Jour. Scient. Labs.), XXIII, 111-126, pls. xxx-xxxv; text-figs. 1, 2.

—— 1928 B
Pseudopalatus pristinus, a new genus and species of phytosaurs from Arizona.
Univ. Missouri Stud., III, No. 1, 3-22, pls. i-iii.

—— 1928 C
The Phytosauria of the Wyoming Triassic.
Denison Univ. Bull. (Jour. Scient. Labs.), XXIII, 141-172, pls. xxxvii-xxxix; text-figs. 1-9.

Merriam, J. C., and C. W. **Gilmore** 1928 A
An ichthyosaurian reptile from marine Cretaceous of Oregon.
Publ. Carnegie Instn. Wash., No. 393, 1-4.

——, and C. **Stock** 1928 A
A further contribution to the mammalian fauna of the Thousand Creek Pliocene, northwestern Nevada.
Publ. Carnegie Instn. Wash., No. 393, 5-21, 3 pls. and 14 text-figs.

Miller, W. D. 1924 A
Variations in the structure of the aftershaft and their taxonomic value.
Amer. Mus. Novit., No. CXL, 1-7, 8 figs.

—— 1926 A
Structural variations in the scoters.
Amer. Mus. Novit., No. CCXLIII, 1-5, 2 figs.

Moodie, R. L. 1928 B
The ichnology of Texas.
Science (n.s.), LXVII, 215-216.
No systematic names applied.

—— 1928 C
The histological nature of ossified tendons found in dinosaurs.
Amer. Mus. Novit., No. CCCXI, 1-15, 6 pls.

Mook, C. C. 1924 B
A new crocodilian from the Wasatch beds.
Amer. Mus. Novit., No. CXXXVII, 1-4 3 figs.

Noble, G. K. 1925 B
An outline of the relation of ontogeny to phylogeny within the Amphibia. I.
Amer. Mus. Novit., No. CLXV, 1-17.

—— 1925 C
An outline of the relation of ontogeny to phyolgeny within the Amphibia.
Amer. Mus. Novit., No. CLXVI, 1-10.
The bibliography presents 36 titles.

—— 1926 B
The pectoral girdle of the brachycephalid frogs.
Amer. Mus. Novit., No. CCXXX, 1-14, 7 figs.
There is a bibliography of 9 titles.

—— 1926 C
The importance of larval characters in the classification of South African Salientia.
Amer. Mus. Novit., No. CCXXXVII, 1-10, 6 figs.
The bibliography contains 10 titles.

—— 1927 A
The plethodontid salamanders; some aspects of their evolution.
Amer. Mus. Novit., No. CCXLIX, 1-26, 10 figs.
The bibliography presents 13 titles.

Nopcsa, F. 1928 A
The genera of reptiles.
Palæobiol., I, 163-188.

Osborn, H. F. 1928 A
Mammoths and man in the Transvaal.
Nature, CXXI, 672-673, 2 figs.

—— 1928 B
Recent discoveries relating to the origin and antiquity of man.
Palæobiol., I, 189-202, figs. 1-3.

Ossenkopp, Georg J. 1925 A
Übersicht unserer derzeitigen Kenntnis von den fossilen niederen Primaten.
Zeitschr. gesamte Anat. Ergeb., XXVI, 463-507, figs. 1-3.
The bibliography occupies pages 463-465.

Parks, W. A. 1926 A
Thescelosaurus warreni, a new species of orthopodous dinosaur from the Edmonton formation of Alberta.
Univ. Toronto Stud. Geol. Ser. No. 21, 1-42, pls. i, ii, 18 text-figs.

—— 1927 A
Champsosaurus albertensis, a new species of rhynchocephalian from the Edmonton formation of Alberta.
Univ. Toronto Stud Geol. Ser. No. 23, 1-49, pls. i, ii; 25 text-figs.

Parks, W. A. 1928 B
Some reflections on paleontology.
Bull. Geol. Soc. Amer., XXXIX, 387-402.

Peterson, O. A. 1928 A
The Brown's Park formation.
Mem. Carnegie Mus., XI, 87-120, pls. ix-xv; 24 text-figs.
In December 1928, a supplementary note (p. 121) was published.

—— 1928 B
Osteology of *Phenacocœlus typus* Peterson.
Mem. Carnegie Mus., XI, 130-174, pls. xvi-xx.
References to the literature are found in foot-notes.

Petronievics, B. 1928 A
Bemerkungen über *Anurognathus* Döderlein.
Anat. Anz., LXV, 214-222, 1 fig.

Pohl, L. 1928 A
Das Os penis als Unterscheidungsmerkmal von *Canis lupus* and *Canis familiaris* L.
Anat. Anz., LXIV, 437-440, 1 fig.

Pohle, H. 1924 A
Antwort auf die Bemerkungen von A. Carlsson betreffend meinen Aufsatz: Die Stellung *Amphictis* und *Nandinia*.
Sitz.-Ber. Ges. naturf. Freunde, Berlin, 1922 (1924), 25-30.

Portis, Alessandro 1899 A
Una nuova specie di Rinoceronti fossile in Italia.
Boll. Soc. geol. Ital., XVIII, 116-131, pl. v.

Price, Paul Holland 1927 A
The coprolite limestone horizon of the Conemaugh series in and around Morgantown, West Virginia.
Ann. Carnegie Mus., XVII, 211-231, pls. x-xxi; text-figs. 1-10.
The bibliography includes 10 titles.

Romer, A. S. 1927 B
Notes on the Permo-Carboniferous reptile *Dimetrodon*.
Jour. Geol., XXXV, 673-689, 9 figs.

—— 1927 C
The pelvic musculature of ornithischian dinosaurs.
Acta Zool., VIII, 225-275, 20 figs.
The bibliography comprises 51 titles.

—— 1928 B
A "fossil" camel recently living in Utah.
Science (n.s.), LXVIII, 19-20.

Romer, A. S. 1928 C

A skeletal model of the primitive reptile *Seymouria* and the phylogenetic position of that type.

Jour. Geol., XXVI, 248-260, 4 figs.

——, and F. M. **Fryxell** 1928 A

Paramiatus gurleyi, a deep-bodied amiid fish.

Amer. Jour. Sci. (5), XVI, 519-527, 3 figs.
The bibliography is in foot-notes.

Rüschkamp, F. 1925 A

Die Seeschildkröte der Maastrichter Kreide.

Palaeont. Zeitschr., VII, 122-140, pls. i, ii, and 2 text-figs.
The bibliography presents 17 titles.

Schindewolf, O. H. 1927 A

Prinzipienfragen der biologischen Systematik.

Palaeont. Zeitschr., IX, 122-166; 167-169.
Discussed by Pompeckj, Abel, Jaekel, Schmidt, Gürich, Gerth, Versluys, and Schindewolf.
The bibliography contains 72 titles.

Schreuder, A. 1928 A

Castor præfiber Depéret in der Fauna von Roussillon.

Palaeont. Zeitschr., IX, 374-378, 2 figs.

Scott, W. B. 1928 B

The origin of the mammalian faunas of North and South America.

Palaeobiol., I, 253-262.

Simpson, G. G. 1926 J

Review of E. A. Stensiö on the head of *Macropetalichthys* (Stensiö, E. A. 1925 B).

Amer. Jour. Sci. (5), XII, 173-174.

—— 1926 K

Review of Stensiö on *Pteraspis* and *Palæaspis* (Stensiö, E. A. 1926 A).

Amer. Jour. Sci. (5), XII, 173.

—— 1926 L

Review of Frick on Hemicyoninæ (Frick, C. 1926 A).

Amer. Jour. Sci. (5), XII, 174-175.

—— 1927 H

A North American Oligocene edentate.

Ann. Carnegie Mus., XVII, 283-296, pl. xxiv.
The bibliography contains 17 titles.

—— 1928 C

A catalogue of the Mesozoic Mammalia in the Geological Department of the British Museum.

4to. I-X, 1-215 pages, pls. i-xii and 56 text-figs.
The bibliography occupies pages 203-208.

Simpson, G. G. 1928 D

New mammalian fauna from the Fort Union of southern Montana (Abstract).

Bull. Geol. Soc. Amer., XXXIX, 300-301.

—— 1928 E

Mesozoic Mammalia. X. Some Triassic mammals.

Amer. Jour. Sci. (5), XV, 154-167, 3 figs.
The bibliography contains 20 titles.

—— 1928 F

Affinities of the Polydolopidæ.

Amer. Mus. Novit., CCCXXIII, 1-13, 7 text-figs.
The bibliography lists 4 papers.

—— 1928 G

American Eocene didelphids.

Amer. Mus. Novit., CCCVII, 1-7, 5 figs.

—— 1928 H

Pleistocene mammals from a cave in Citrus County, Florida.

Amer. Mus. Novit., No. CCCXXVIII, 1-16, figs. 1-11.

—— 1928 I

Further notes on Mongolian Cretaceous mammals.

Amer. Mus. Novit., No. CCCXXIX, 1-14, figs. 1-7.

—— 1928 J

Affinities of the Mongolian Cretaceous insectivores.

Amer. Mus. Novit., No. CCCXXX, 1-11, 1 fig.

—— 1928 K

Mesozoic Mammalia. XII: The internal mandibular grooves of Jurassic mammals.

Amer. Jour. Sci. (5), XV, 461-470, 7 figs.
There is a bibliography of 6 titles.

——, and H. O. **Elftman** 1928 A

Hind limb musculature and habits of a Paleocene multituberculate.

Amer. Mus. Novit., No. CCCXXXIII, 1-19, 6 figs.
There are 11 titles in the bibliography.

Sinclair, W. J. 1928 A

Omorhamphus, a new flightless bird from the Lower Eocene of Wyoming.

Proc. Amer. Philos. Soc., LXVII, 51-65, pls. i, ii; text-figs. 1-3.

Spier, Leslie 1928 A

Concerning man's antiquity at Frederick, Oklahoma.

Science (n.s.), LXVII, 160-161.

Stefano, G. 1905 A

Appunti sui batraci e sui rettili del Quercy appartenenti alla collezione Rossignol.

Boll. Soc. geol. Ital., XXIV, 17-67, pls. iii-v. The bibliography presents 32 titles.

Steinmann, G. 1927 A

Über Ganoiden und Knochenfische.

Palaeont. Zeitschr., IX, 9-83, pl. i; text-figs. 1-17.

Discussed by Jaekel, Abel, Hennig, Pompeckj, Sewertzoff and Steinmann.

Sternberg, C. M. 1927 B

Homologies of certain bones of the ceratopsian skull.

Trans. Roy. Soc. Canada (3), XXI, 135-143, pls. i-iii.

—— 1928 A

A new armored dinosaur from the Edmonton formation of Alberta.

Trans. Roy. Soc. Canada (3), XXII, sec. iv, 93-106, pls. i-iii.

Stetson, Henry C. 1928 A

A new *Thelodus.*

Amer. Jour. Sci. (5), XVI, 221-231, figs. 1-6. The bibliography presents 21 titles.

Stock, C. 1928 B

A peccary from the McKittrick Pleistocene of California.

Publ. Carnegie Instn. Wash., No. 393, 23-27, 6 figs.

—— 1928 C

Tanupolama, a new genus of llama from the Pleistocene of California.

Publ. Carnegie Instn. Wash., No. 393, 29-37, pls. i-vi.

—— 1928 D

Canid and proboscidean remains from the Ricardo deposits, Mohave Desert, California.

Publ. Carnegie Instn. Wash., No. 393, 41-47, pls. i-iv and 1 text-fig.

——, and E. L. **Furlong** 1928 B

The Pleistocene elephants of Santa Rosa Island, California.

Science (n.s.), LXVIII, 140-141.

Suschkin, P. P. 1928 A

Contribution to the cranial morphology of *Captorhinus* Cope (Reptilia, Cotylosauria, Captorhinidæ).

Palæobiol., I, 263-280, 10 text-figs. In the bibliography are cited 20 titles.

Tanner, Vasco M. 1925 A

Notes on the collection of fossil fishes contained in the University of Utah, with the description of one new species.

Bull. Univ. Utah, XIV, No. 6 Geol., 1-13, 2 pls.

Thorpe, M. R. 1926 A

Review of C. W. Gilmore on fossil footprints from the Grand Canyon (Gilmore, C. W. 1926 A).

Amer. Jour. Sci. (5), XII, 77.

—— 1927 A

Review of F. B. Loomis's "The Evolution of the Horse" (Loomis, F. B. 1926 A.)

Amer. Jour. Sci. (5), XIV, 167-169.

—— 1928 A

New Triassic fossil locality.

Geol. Soc. Amer. Prelim. lists, 41st meet., 39.

Tolmachoff, I. P. 1928 A

Carcasses of the mammoth and rhinoceroses found in the frozen ground of Siberia.

Bull. Geol. Soc. Amer., XXXIX, 294-296.

Van Bemmelen, J. F. 1928 A

Animaux disparus.

Palæobiol., I, 281-294.

Van Straelen, Victor 1925 A

The microstructure of the dinosaurian egg-shells from the Cretaceous beds of Mongolia.

Amer. Mus. Novit., No. CLXXIII, 1-4, 2 figs.

—— 1928 A

Les œufs de reptiles fossiles.

Palæobiologica, I, 295-312, pls. xxvi-xxviii. With numerous citations of the literature.

Weber, Max 1928 A

Über indikative oder Führertiere.

Palæobiologica, I, 313-322.

——, and Othenio **Abel** 1928 A

Die Säugetiere. Einführung in die Anatomie und Systematik der recent und fossilen Mammalia.

Zweite Auflage. Band II. Systematischer Teil. Mit 573 Abbildungen im Text. Gustav Fischer in Jena. Pages i-xxiv+1-898.

The bibliography occupies pages 840-879.

Weigelt, J. 1927 A

Rezente Wirbeltierleichen und ihre Bedeutung für die Palaentologie.

Palaeont. Zeitschr., IX, 327-328.
Discussed by O. Abel.

Wetmore, A. 1928 E

The systematic position of the fossil bird *Cyphornis magnus*.

Can. Geol. Surv., Bull. No. 49 (Geol. Ser. 48), 1-4, fig. 1.

Wiman, C. 1928 A

Einige Beobachtungen an Flugsauriern.

Palæobiol., I, 363-370, figs. 1-5.
There is a bibliography of 9 titles.

Zdansky, O. 1928 A

Die Säugetiere der Quartärfauna von Chou- K'ou-Tien.

Palæont. Sinica, V, fasc. 4, 1-146, pls. i-xvi, 16 text-figs.
The bibliography occupies pages 142-146.

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